

## **Appendix A      NOP and NOP Comments**

## Appendices

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# NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**TO:** Agencies, Organizations and Interested Parties

**PROJECT TITLE:** Rancho Cucamonga Campus Master Plan

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report

**NOTICE IS HEREBY GIVEN** that the Chaffey Community College District (District), as Lead Agency under the California Environmental Quality Act (CEQA), will prepare a Draft Environmental Impact Report (Draft EIR) for the Rancho Cucamonga Campus Master Plan project pursuant to the California Public Resources Code (PRC), Division 13, Section 21000 et seq. (CEQA Statute) and the California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Section 15000 et seq. (CEQA Guidelines).

The purpose of the Notice of Preparation is to (1) serve as a public notice of an environmental impact report (EIR) pursuant to the CEQA Guidelines Section 15082, and (2) advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared. The District, as Lead Agency, respectfully requests that any agencies responding to this notice respond in a manner consistent with CEQA Guidelines Section 15082(b). Agency and public comments should, at a minimum, identify the significant environmental issues, reasonable alternatives, and/or mitigation measures that should be explored in the EIR. In compliance with CEQA Guidelines Section 15060(d) and 15082, the District will not be preparing an initial study and will begin work directly on the Draft EIR.

**PROJECT LOCATION:** The project site covers several locations throughout the 200-acre Chaffey College Rancho Cucamonga Campus at 5885 Haven Avenue, City of Rancho Cucamonga, San Bernardino County (Assessor’s Parcel Number 0201-191-15, -29, -32). Figure 1, *Aerial Photograph*, shows the project site and surrounding roadways.

**PROJECT DESCRIPTION:** The Master Plan for the Rancho Cucamonga Campus plans for physical improvements throughout the campus in 5 phases over 30 years. The proposed project would involve demolition of approximately 127,000 sq. ft. of buildings and facilities, construction of about 673,00 sq. ft. of building space, and renovations of 187,000 sq. ft., along with ADA and site improvements. Figure 2, *Existing Campus Plan*, shows the existing campus facilities and Figure 3, *New Facilities and Renovations*, shows proposed building locations and existing facilities to be renovated.

### Project Components and Phasing

Demolition	New Building / Facility	Renovations and Repurposed Space
<b>Phase 1</b>		
<ul style="list-style-type: none"> <li>▪ Administration (AD; Building 1)</li> <li>▪ Campus Center East (CCE; Building 20)</li> <li>▪ Bookstore (B; Building 67)</li> <li>▪ Campus Police (CP; Building 23)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Instructional Building 1</li> <li>▪ Campus Center East</li> </ul>	<ul style="list-style-type: none"> <li>▪ ADA and Site Improvements 1</li> <li>▪ Swing Space (existing Library modifications)</li> <li>▪ Swimming Pool Renovation</li> </ul>
<b>Phase 2</b>		
<ul style="list-style-type: none"> <li>▪ Business Education (BE; Building 5)</li> <li>▪ Language Arts (LA; Building 10)</li> <li>▪ Social Science (SS; Building 15)</li> <li>▪ Wargin Hall (WH; Building 17)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Instructional Building 2</li> <li>▪ Student Services Building</li> </ul>	<ul style="list-style-type: none"> <li>▪ ADA and Site Improvements 2</li> <li>▪ Marie Kane Student Services &amp; Administration (SSA)</li> </ul>

**Project Components and Phasing**

Demolition	New Building / Facility	Renovations and Repurposed Space
<ul style="list-style-type: none"> <li>▪ Vocational Education (VSS; Building 18) (also known as Vocational and Student Support)</li> </ul>		
<b>Phase 3</b>		
None.	<ul style="list-style-type: none"> <li>▪ Flexible Performance Space (FPS) and TV Studio Production Space (TV) Building</li> </ul>	<ul style="list-style-type: none"> <li>▪ ADA and Site Improvements 3</li> <li>▪ Aeronautics (AERO)</li> <li>▪ Berz Educational Excellence Center (BEB; Building 51)</li> </ul>
<b>Phase 4</b>		
<ul style="list-style-type: none"> <li>▪ Math (MATH; Building 24)</li> <li>▪ Physical Science (PS; Building 14)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Instructional Building 3</li> <li>▪ Operational Support Building</li> </ul>	<ul style="list-style-type: none"> <li>▪ ADA and Site Improvements 4</li> <li>▪ Skills Lab Renovation (SL)</li> <li>▪ Theatre (TA)</li> </ul>
<b>Phase 5</b>		
<ul style="list-style-type: none"> <li>▪ Health Science East (HS; Building 3)</li> <li>▪ Health Science West (HS; Building 42)</li> <li>▪ Maintenance &amp; Operation (Building 13)</li> <li>▪ Library (LI)</li> <li>▪ Modular Classrooms/Offices (MOD)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Instructional Building 4</li> <li>▪ Maintenance Building</li> </ul>	<ul style="list-style-type: none"> <li>▪ ADA and Site Improvements 5</li> <li>▪ Earl Sicosky Gymnasium (GYM; Building 8)</li> <li>▪ Warehouse (Building 22)</li> <li>▪ Kinesiology and Athletic Fields</li> </ul>

**POTENTIAL ENVIRONMENTAL EFFECTS:** In accordance with Section 15082 of the CEQA Guidelines, the District has prepared this Notice of Preparation to provide agencies, organizations, and interested parties with information describing the proposed project and its potential environmental effects. Environmental factors that will be analyzed in the Draft EIR are:

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Aesthetics                  | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality                   |
| <input type="checkbox"/> Biological Resources        | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Energy                        |
| <input type="checkbox"/> Geology & Soils             | <input type="checkbox"/> Greenhouse Gas Emissions         | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology & Water Quality   | <input type="checkbox"/> Land Use & Planning              | <input type="checkbox"/> Mineral Resources             |
| <input type="checkbox"/> Noise                       | <input type="checkbox"/> Population & Housing             | <input type="checkbox"/> Public Services               |
| <input type="checkbox"/> Recreation                  | <input type="checkbox"/> Transportation                   | <input type="checkbox"/> Tribal Cultural Resources     |
| <input type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Wildfire                         |  |

**DOCUMENT AVAILABILITY:** The 30-day public review period for the NOP is from **June 18, 2021, to July 19, 2021**. In accordance with the time limits mandated by State law, if there are any concerns about the scope and content of the information to be addressed in EIR, please email written comments to the District, at the email address below, at the earliest possible date but not later than July 19, 2021. This NOP is also available for review on Chaffey Community College District, Facilities and Development website: <https://www.chaffey.edu/facilitiesdevelopment/CEQA-Compliance.php>

**PUBLIC COMMENTS:** Please indicate a contact person and email your comments to:

[CEQA@chaffey.edu](mailto:CEQA@chaffey.edu)

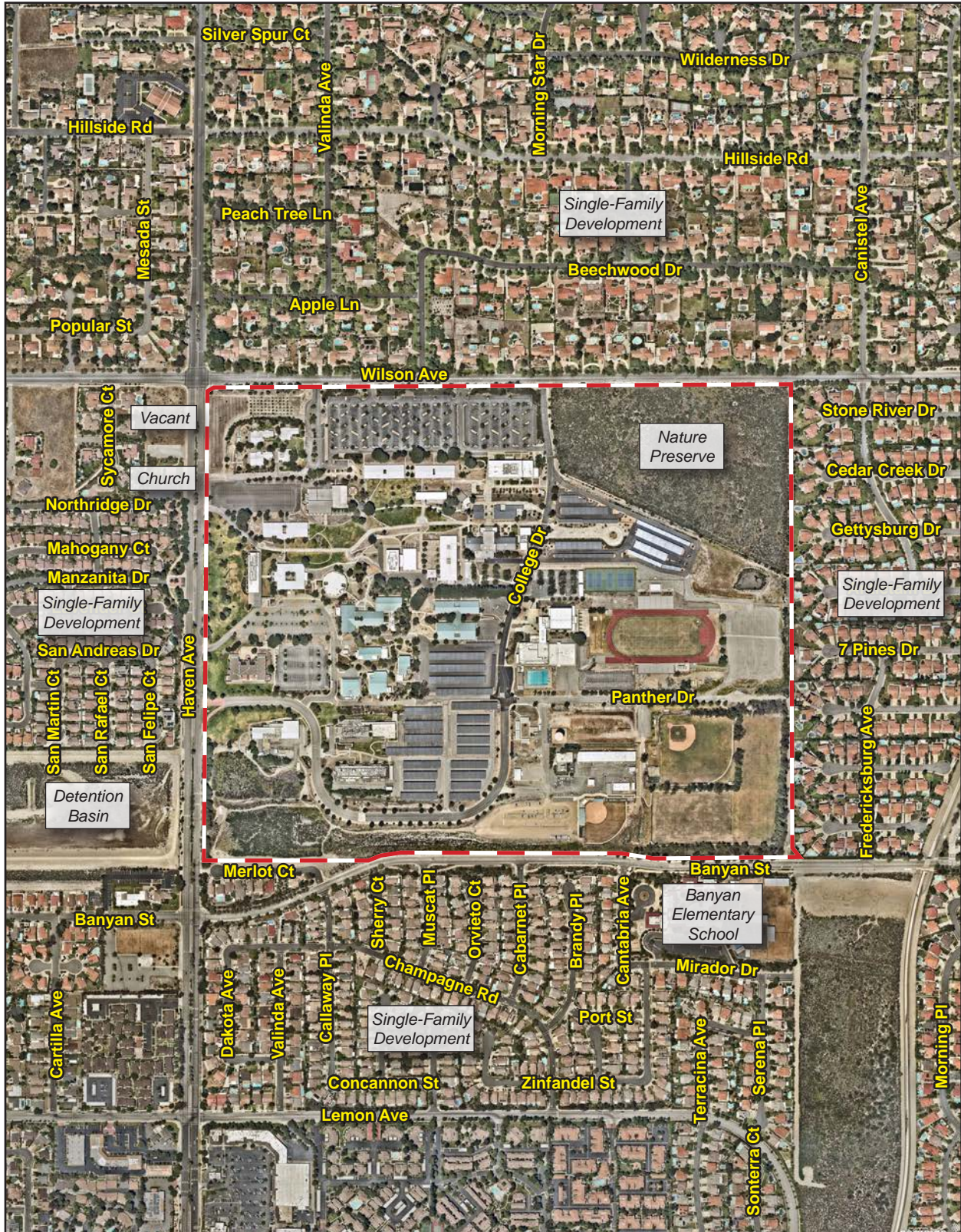
Please include **“CEQA Rancho”** in the subject line.

The written comments can also be sent by U.S. mail to: **Chaffey Community College District, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002. ATTN: Measure P Bond Team – CEQA Comments.**

If you require additional information, please contact Samir Shah at (909) 652-6171.



Figure 1 - Aerial Photograph



— Chaffey College - Rancho Cucamonga Campus

0 750  
Scale (Feet)

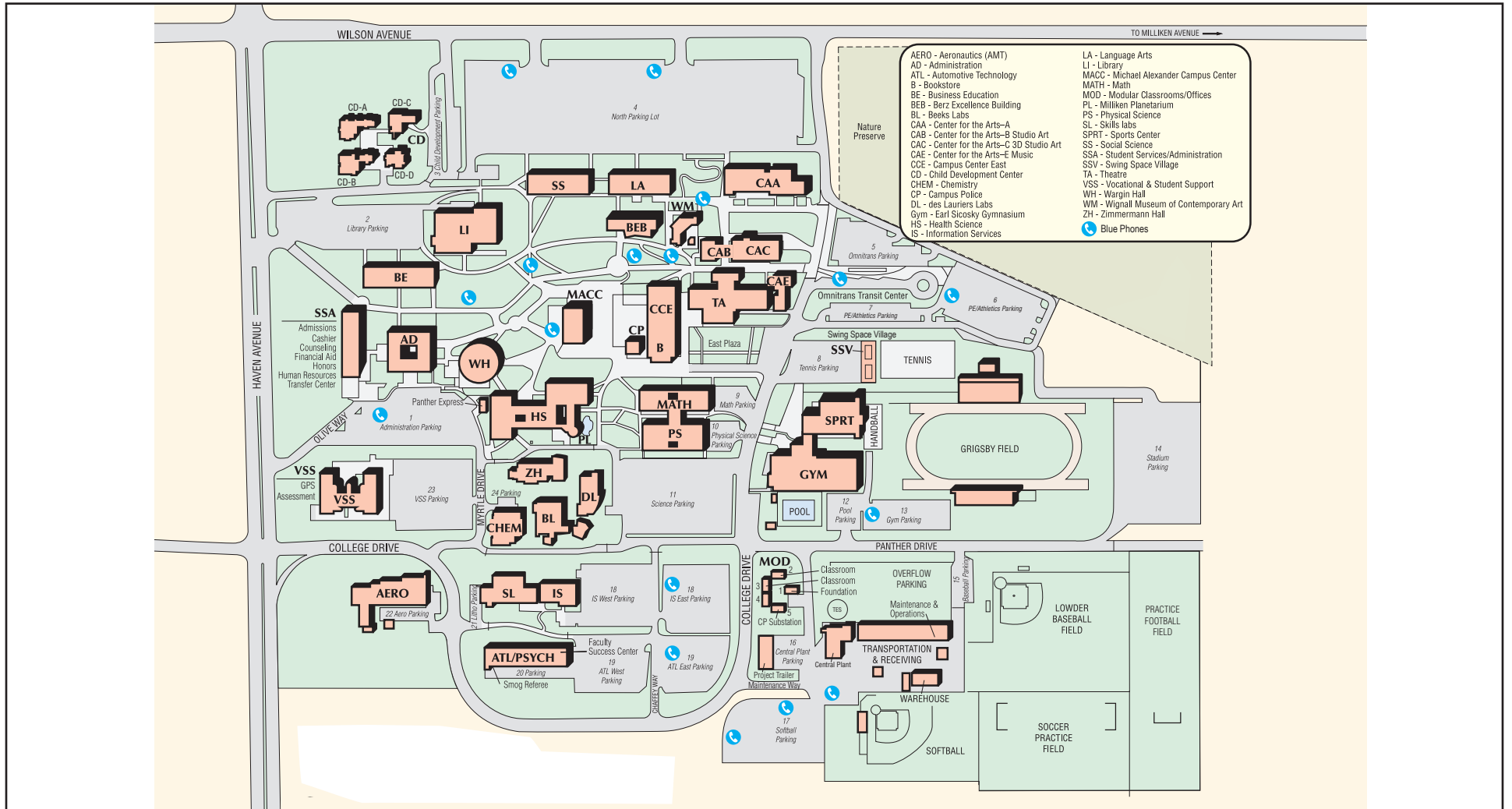


Source: Nearmap, 2020

PlaceWorks



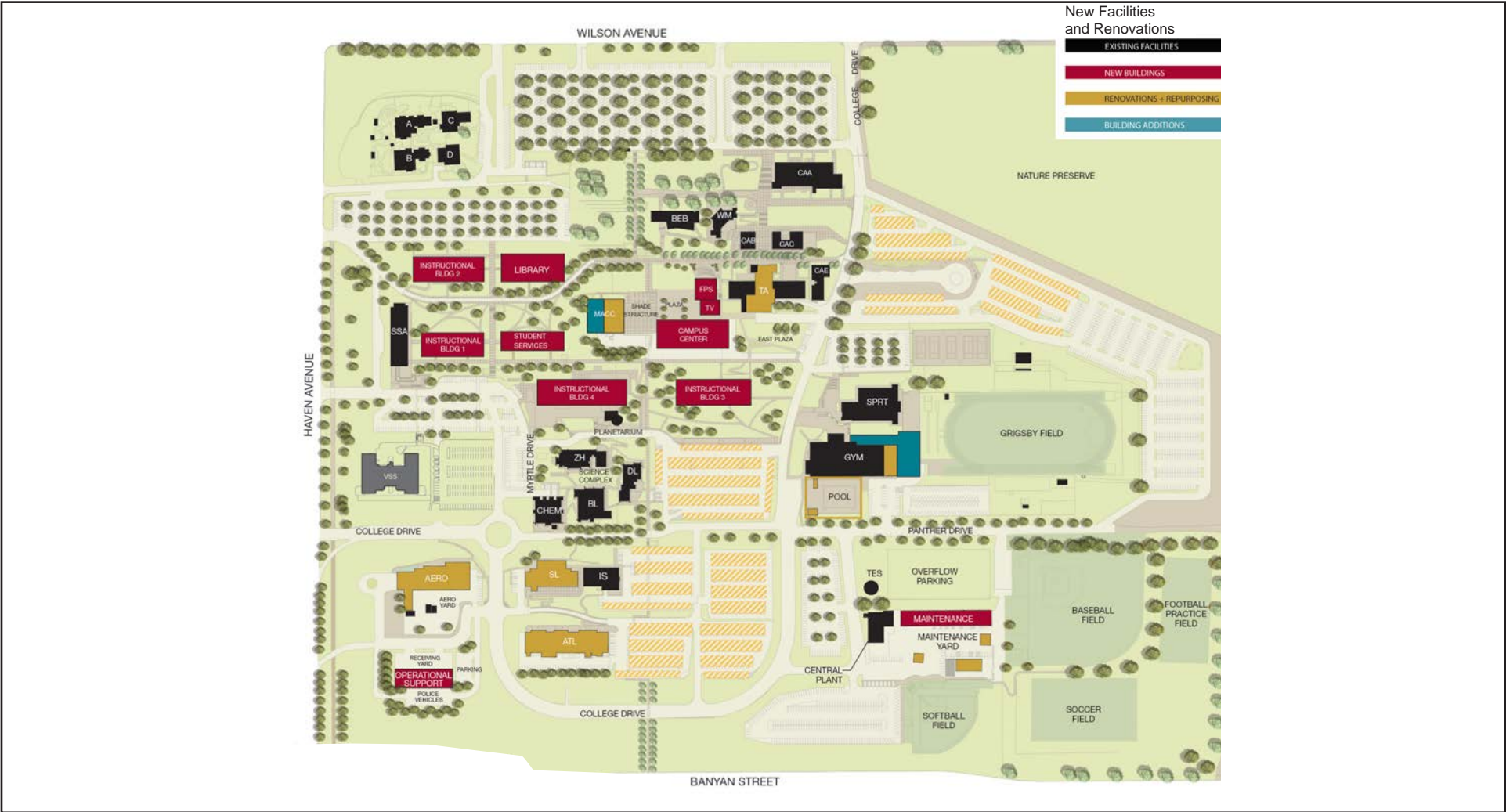
Figure 2 - Existing Campus Plan



Source: Chaffey College, 2020



Figure 3 - New Facilities and Renovations



Source: HMC Architects 2018, Chaffey Community College District 2020



**From:** Smith, Michael <[Michael.Smith@cityofrc.us](mailto:Michael.Smith@cityofrc.us)>  
**Sent:** Tuesday, July 20, 2021 12:51 AM  
**To:** CEQA <[ceqa@chaffey.edu](mailto:ceqa@chaffey.edu)>  
**Subject:** [EXT] CEQA Rancho - Rancho Cucamonga Campus Master Plan

**CAUTION: This email originated from outside of Chaffey College. Exercise caution when opening attachments or clicking links, especially from unknown senders.**

Hello,

The City of Rancho Cucamonga's has received the Notice of Preparation (NOP) dated June 18, 2021 of the Draft Environmental Impact Report (DEIR) for *Chaffey College's Master Plan* with a comment period that closes on July 19, 2021.

We have reviewed the NOP and have the following, broad topics for discussion in the DEIR. Please consider the following impacts on the City, in general, and the surrounding neighborhoods that are adjacent to Chaffey College:

- aesthetic impacts due to added glare generated by new or increased lighting;
- air quality and greenhouse gas emissions during construction, and new/expanded activity and operations;
- noise generated by additional traffic and new/expanded activity and operations;
- parking
- traffic circulation impacts to the City's "major" and "neighborhood" street network;
- vehicle access to and from the campus via existing and new drive aisles;
- traffic and vehicle miles traveled (VMT) due to an increase in the number of students and staff present due to new classrooms and facilities constructed, and new services offered;
- potential impact to utilities and services in the northern part of the City due to an updated/expanded campus
- missing pedestrian infrastructure on Haven and Wilson Avenues;
- ADA-related access infrastructure between the public right-of-way and the campus;

The City would like to participate in the preparation and review of the DEIR. Please send all notices related to the subject project and applicable procedural steps to me via the address and email address listed below. Also, please notify me of any future on-campus projects. Our awareness of these projects will assist us in informing and serving the Community.

Thank you.

**Mike Smith**  
**Principal Planner**  
**City of Rancho Cucamonga**  
**10500 Civic Center Drive**  
**Rancho Cucamonga, CA 91730**  
**(909) 774-4317 (direct)**

(909) 477-2750 ext. 4317

[michael.smith@cityofrc.us](mailto:michael.smith@cityofrc.us)





July 15, 2021

Mr. Samir Shah  
Bond Program Manager  
Chaffey Community College District  
5885 Haven Avenue  
Rancho Cucamonga, CA 91737

Subject: Notice of Preparation of a Draft Environmental Impact Report  
Rancho Cucamonga Campus Master Plan Project  
State Clearinghouse No. 2021060412

Dear Mr. Shah:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the Chaffey Community College District for the Rancho Cucamonga Campus Master Plan Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

### **CDFW ROLE**

CDFW is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on Projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

## **PROJECT DESCRIPTION SUMMARY**

The proposed Project includes a master plan that will detail the physical improvements at various locations throughout the campus in 5 phases over the span of 30 years. The proposed Project would involve demolition of approximately 127,000 sq. ft. of building and facilities, construction of about 673,000 sq. ft. of building space, and renovations to 187,000 sq. ft., as well as Americans with Disabilities Act (ADA) and site improvements. A portion of the 200-acre parcel consists of undeveloped/undisturbed lands that will be newly developed as part of the Project. The Project site is located at 5885 Haven Avenue, in the City of Rancho Cucamonga, San Bernardino County, California. Specific details of the 5 phases for the proposed Project are described below.

1. Phase 1: Demolition of the Administration Building, Campus Center East Building, Bookstore, and Campus Police Building. Construction of the Instructional Building 1 and Campus Center East Building. Renovations to the Swing Space and Swimming Pool. ADA and Site Improvements 1.
2. Phase 2: Demolition of the Business Education Building, Language Arts Building, Social Science Building, Vocational Education Building, and Wargin Hall. Construction of the Instructional Building 2 and Student Services Building. Renovations to the Marie Kane Student Services and Administration Building. ADA and Site Improvements 2.
3. Phase 3: Construction of a Flexible Performance Space and TV Studio Production Space Building. Renovations to the Aeronautics Building and Berz Educational Excellence Center. ADA and Site Improvements 3.
4. Phase 4: Demolition of the Math Building and Physical Science Building. Construction of the Instructional Building 3 and Operational Support Building. Renovations to the Skills Lab Renovation and Theatre Building. ADA and Site Improvements 4.
5. Phase 5: Demolition of the Heath Science East Building, Health Science West Building, Maintenance and Operation Building, Library, and Modular Classrooms/Offices. Construction of the Instruction Building 4 and Maintenance

Building. Renovations to the Earl Sicosky Gymnasium, Warehouse Building, and Kinesiology and Athletic Fields. ADA and Site Improvements 5.

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations below to assist Chaffey Community College District in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

CDFW recommends that the forthcoming DEIR address the following:

### **Assessment of Biological Resources**

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a Project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats.

The CDFW recommends that the DEIR specifically include:

1. An assessment of the various habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW's California Natural Diversity Database (CNDDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDDB@wildlife.ca.gov to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project.

Please note that CDFW's CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point



in gathering information about the *potential presence* of species within the general area of the Project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

#### Burrowing Owl (*Athene cunicularia*)

The Project site has the potential to provide suitable foraging and/or nesting habitat for burrowing owl. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code section 86 as “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill.”

CDFW recommends that the Chaffey Community College District follow the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012); available for download from CDFW’s website:

<https://www.wildlife.ca.gov/conservation/survey-protocols>. The Staff Report on Burrowing Owl Mitigation, specifies three steps for Project impact evaluations:

- a. A habitat assessment;
- b. Surveys; and
- c. An impact assessment

As stated in the Staff Report on Burrowing Owl Mitigation, the three progressive steps are effective in evaluating whether a Project will result in impacts to burrowing owls, and the information gained from the steps will inform any subsequent

avoidance, minimization, and mitigation measures. Habitat assessments are conducted to evaluate the likelihood that a site supports burrowing owl. Burrowing owl surveys provide information needed to determine the potential effects of proposed Projects and activities on burrowing owls, and to avoid take in accordance with Fish and Game Code sections 86, 3503, and 3503.5. Impact assessments evaluate the extent to which burrowing owls and their habitat may be impacted, directly or indirectly, on and within a reasonable distance of a proposed CEQA Project activity or non-CEQA Project.

If burrowing owls are found to occupy the Project site and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 2 artificial burrow constructed to 1 natural burrow collapsed (2:1) as minimization for the potentially significant impact of evicting burrowing owls. Burrowing owls may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance of the Project site during Project activities, at a rate that is sufficient to detect burrowing owls if they return. CDFW also recommends that when temporary or permanent burrow exclusion and/or burrow closure is implemented, burrowing owls should not be excluded from burrows unless or until a Burrowing Owl Exclusion Plan is developed and reviewed by CDFW; permanent loss of occupied burrow(s) and habitat is mitigated in accordance with the Staff Report; site monitoring is conducted prior to, during, and after exclusion of burrowing owls from their burrows sufficient to ensure take is avoided; and excluded burrowing owls are documented using artificial or natural burrows on an adjoining mitigation site.

If burrowing owls are found to occupy the Project site and avoidance is not possible, CDFW recommends mitigation for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. CDFW recommends permanent protection of mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, development, and implementation of a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls, and funding for the maintenance and

management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see <https://www.wildlife.ca.gov/Conservation/Plants>).
5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).
6. A full accounting of all open space and mitigation/conservation lands within and adjacent to the Project.

#### **Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources**

1. The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:
2. A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by zoning of development Projects or other Project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.
3. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).

#### **Alternatives Analysis**

CDFW recommends the DEIR describe and analyze a range of reasonable alternatives to the Project that are potentially feasible, would “feasibly attain most of the basic objectives of the Project,” and would avoid or substantially lessen any of the Project’s

significant effects (CEQA Guidelines § 15126.6[a]). The alternatives analysis should also evaluate a “no project” alternative (CEQA Guidelines § 15126.6[e]).

### **Mitigation Measures for Project Impacts to Biological Resources**

The DEIR should identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. The Chaffey Community College District should assess all direct, indirect, and cumulative impacts that are expected to occur as a result of the implementation of the Project and its long-term operation and maintenance. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Fully protected species may not be taken or possessed at any time. Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species.
2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). Based on review of CNDDDB, and/or knowledge of the Project site/vicinity/general area, CDFW is aware that the following sensitive plant species have the potential to occur onsite/have previously been reported onsite: Parry’s spineflower (*Chroizanthe parryi* var. *parryi*) and mesa horkelia (*Horkelia cuneata* var. *puberula*). In addition, Riversidian Alluvial Fan Sage Scrub has the potential to occur onsite. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.
3. *California Species of Special Concern (CSSC)*: CSSC status applies to animals generally not listed under the federal Endangered Species Act or the CESA, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. CSSCs should be considered during the environmental review process. CSSC that have the potential or have been documented to occur within or adjacent to the Project area, including, but not limited to: burrowing owl. For significant nesting

populations, annual monitoring during the nesting season for the period of construction and for a few years following the end of construction is recommended.

4. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement, and preservation should be evaluated and discussed in detail. Where habitat preservation is not available onsite, offsite land acquisition, management, and preservation should be evaluated and discussed in detail.
5. The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.
6. If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the DEIR. CEQA Guidelines section 15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d. 296; *Gentry v. City of Murrieta* (1995) 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc. v. County of Orange* (2005) 131 Cal. App. 4th 777).
7. CDFW recommends that the DEIR specify mitigation that is roughly proportional to the level of impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). The mitigation should provide long-term conservation value for the suite of species and habitat being impacted by the Project. Furthermore, in order for mitigation measures to be effective, they need to be specific, enforceable, and feasible actions that will improve environmental conditions.
8. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to

develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

9. *Nesting Birds and Migratory Bird Treaty Act*: Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

CDFW recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may

include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. If pre-construction surveys are proposed in the DEIR, the CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

10. *Moving out of Harm's Way*: To avoid direct mortality, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety (i.e., CDFW does not recommend relocation to other areas). Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss.
11. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

### **Lake and Streambed Alteration Program**

Based on review of material submitted with the NOP and review of aerial photography there appears to be a spillway, drainage pipe, and streambed features within and along the Southwest corner of the Project site. Depending on how the Project is designed and constructed, it is likely that the Project applicant will need to notify CDFW per Fish and Game Code section 1602. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to <https://www.wildlife.ca.gov/Conservation/LSA/Forms>.

## **ADDITIONAL COMMENTS AND RECOMMENDATIONS**

To ameliorate the water demands of this Project, CDFW recommends incorporation of water-wise concepts in Project landscape design plans. In particular, CDFW recommends xeriscaping with locally native California species, and installing water-efficient and targeted irrigation systems (such as drip irrigation). Local water agencies/districts, and resource conservation districts in your area may be able to provide information on plant nurseries that carry locally native species, and some facilities display drought-tolerant locally native species demonstration gardens (for example the Riverside-Corona Resource Conservation District in Riverside). Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: <http://saveourwater.com/what-you-can-do/tips/landscaping/>

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). Information can be submitted online or via completion of the CNDDDB field survey form at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.



Samir Shah, Bond Program Manager  
Chaffey Community College District  
July 15, 2021  
Page 12

## FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

## CONCLUSION

CDFW appreciates the opportunity to comment on the NOP of a DEIR for the Rancho Cucamonga Campus Master Plan Project (SCH No. 2021060412) and recommends that the Chaffey Community College District address the CDFW's comments and concerns in the forthcoming DEIR. If you should have any questions pertaining to the comments provided in this letter, please contact Julisa Portugal, Environmental Scientist, at (909) 260-1998 or at [Julisa.Portugal@wildlife.ca.gov](mailto:Julisa.Portugal@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
8091B1A9242F49C...

Scott Wilson  
Environmental Program Manager

ec: HCPB CEQA Coordinator  
Habitat Conservation Planning Branch

Office of Planning and Research, State Clearinghouse, Sacramento  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

## REFERENCES

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California Vegetation, 2<sup>nd</sup> ed. California Native Plant Society Press, Sacramento, California.  
<http://vegetation.cnps.org/>

Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation*.  
<https://www.wildlife.ca.gov/conservation/survey-protocols>



## NATIVE AMERICAN HERITAGE COMMISSION

June 30, 2021

Samir Shah, Bond Program Manager  
Chaffey Community College District  
5885 Haven Avenue  
Rancho Cucamonga, CA 91737-3002



CHAIRPERSON  
**Laura Miranda**  
Luiseño

**Re: 2021060412, Rancho Cucamonga Campus Master Plan Project, San Bernardino County**

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

Dear Mr. Samir:

SECRETARY  
**Merril Lopez-Kelfer**  
Luiseño

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

COMMISSIONER  
**Julie Tumamala-Stenslie**  
Chumash

COMMISSIONER  
[Vacant]

COMMISSIONER  
[Vacant]

COMMISSIONER  
[Vacant]

EXECUTIVE SECRETARY  
**Christina Snider**  
Pomo

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373 3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)

## AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).

  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)



## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at:

[https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
  
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:  
[Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov).

Sincerely,



Andrew Green  
Cultural Resources Analyst

cc: State Clearinghouse



SENT VIA E-MAIL:

July 13, 2021

[CEQA@chaffey.edu](mailto:CEQA@chaffey.edu)

Samir Shah, Measure P Bond Team – CEQA Comments  
Chaffey Community College District  
5885 Haven Avenue  
Rancho Cucamonga, California 91737

**Notice of Preparation of a Draft Environmental Impact Report for the  
Rancho Cucamonga Campus Master Plan**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send a copy of the Draft EIR upon its completion and public release directly to South Coast AQMD as copies of the Draft EIR submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

**CEQA Air Quality Analysis**

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website<sup>1</sup> as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod<sup>2</sup> land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds<sup>3</sup> and localized significance thresholds (LSTs)<sup>4</sup> to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road

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<sup>1</sup> South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

<sup>2</sup> CalEEMod is available free of charge at: [www.caleemod.com](http://www.caleemod.com).

<sup>3</sup> South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

<sup>4</sup> South Coast AQMD's guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.



mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment<sup>5</sup>.

In the event that implementation of the Proposed Project or components of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft EIR. The assumptions in the air quality analysis in the EIR will be the basis for evaluating the permit under CEQA and imposing permit conditions and limits. Questions on permits should be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

### **Mitigation Measures**

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook<sup>1</sup>, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 Air Quality Management Plan<sup>6</sup>, and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy<sup>7</sup>.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov).

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS  
SBC210622-03  
Control Number

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<sup>5</sup> South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

<sup>6</sup> South Coast AQMD's 2016 Air Quality Management Plan can be found at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf> (starting on page 86).

<sup>7</sup> Southern California Association of Governments' 2020-2045 RTP/SCS can be found at: [https://www.connectsocial.org/Documents/PEIR/certified/Exhibit-A\\_ConnectSoCal\\_PEIR.pdf](https://www.connectsocial.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf).

**From:** [CEQA](#)  
**To:** [Samir Shah](#)  
**Subject:** Fw: [EXT] RE: CEQA Rancho, DEIR draft for Chaffey College  
**Date:** Tuesday, July 13, 2021 5:12:49 PM  
**Attachments:** [image21c8d4.PNG](#)

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**From:** Ryan Nordness <Ryan.Nordness@sanmanuel-nsn.gov>  
**Sent:** Tuesday, June 29, 2021 8:24 PM  
**To:** CEQA <ceqa@chaffey.edu>  
**Subject:** [EXT] RE: CEQA Rancho, DEIR draft for Chaffey College

**CAUTION: This email originated from outside of Chaffey College. Exercise caution when opening attachments or clicking links, especially from unknown senders.**

Hello,

Thank you for sending over the notice for the DEIR. Upon our review I did not see a cultural resource review or study. How did the DEIR come to the conclusion that there would be little to no impact on existing cultural resources?

## Ryan Nordness

CULTURAL RESOURCE ANALYST

Email: [Ryan.Nordness@sanmanuel-nsn.gov](mailto:Ryan.Nordness@sanmanuel-nsn.gov)

O: (909) 864-8933 Ext 50-2022

Internal: 50-2022

M: 909-838-4053

26569 Community Center Dr Highland California 92346



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July 2, 2021



**Via Email and U.S. Mail**

Chaffey College  
Attn: Samir Shah  
5885 Haven Ave.  
Rancho Cucamonga, CA 91737

**RE: Public Records Act Request and Request for Mailed Notice of Public Hearings  
and Actions – 5885 Haven Ave. Rancho Cucamonga, CA 91737**

Dear Mr. Shah,

CREED LA is writing to request a copy of any and all records related to the project, the Rancho Cucamonga Campus Master Plan, located at 5885 Haven Avenue in Rancho Cucamonga. The project involves the demolition of 127,000 square feet of buildings and facilities, the renovation of 187,000 square feet of space, and the construction of 673,000 square feet of new college campus space. We are also writing to request copies of all communications and mailed notice of any and all hearings and/or actions related to the Project.

Our request for mailed notice of all hearings includes hearings, study sessions and community meetings related to the Project, certification of the MND (or recirculated DEIR), and approval of any Project entitlements. This request is made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108 and 21152 and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. Our request includes notice to any City actions, hearings or other proceedings regarding the Project, Project approvals and any actions taken, or additional documents released pursuant to the California Environmental Quality Act.

Our request for all records related to the Project is made pursuant to the California Public Records Act. (Government Code § 6250 et seq.) This request is also made pursuant to Article I, section 3(b) of the California Constitution, which provides a constitutional right of access to information concerning the conduct of government. Article I, section 3(b) provides that any statutory right to information shall be broadly construed to provide the greatest access to government information and further requires that any statute that limits the right of access to information shall be narrowly construed.

We will pay for any direct costs of duplication associated with filling this request up to \$200. However, please contact me at (877) 810-7473 with a cost estimate before copying/scanning the materials.

Pursuant to Government Code Section 6253.9, if the requested documents are in electronic format and are 10 MB or less (or can be easily broken into sections of 10 MB or less), please email them to me as attachments.

My contact information is:

**U.S. Mail**

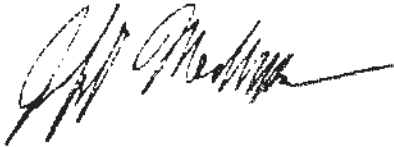
Jeff Modrzejewski  
CREED LA  
501 Shatto Place, Suite 200  
Los Angeles, CA, 90020

**Email**

[creedla@crcdla.com](mailto:creedla@crcdla.com)

Please call me if you have any questions. Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Modrzejewski", with a long horizontal flourish extending to the right.

Jeff Modrzejewski  
Executive Director

P: (626) 381-9248  
F: (626) 389-5414  
E: info@mitchtsailaw.com



**Mitchell M. Tsai**  
Attorney At Law

155 South El Molino Avenue  
Suite 104  
Pasadena, California 91101

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**VIA E-MAIL ONLY**

July 12, 2021

Samir Shah  
Measure P. Bond Program Manager  
Chaffey Community College  
5855 Haven Avenue  
Rancho Cucamonga, CA 91737  
E: Samir.shah@chaffey.edu

RE: Rancho Cucamonga Campus Master Plan

Dear Samir Shah,

On behalf of the Southwest Regional Council of Carpenters ( “**Commenters**” or “**Southwest Carpenters**”), my Office is submitting these comments on the Chaffey Community College District’s (“**District**” or “**Lead Agency**”) Notice of Preparation of a Draft Environmental Impact Report (“**NOP**”) for the Rancho Cucamonga Campus Master Plan (“**Project**”).

The Southwest Carpenters is a labor union representing more than 50,000 union carpenters in six states, including California, and has a strong interest in well-ordered land use planning, addressing the environmental impacts of development projects and equitable economic development.

Individual members of the Southwest live, work and recreate in the area and surrounding communities and would be directly affected by the Project’s environmental impacts.

Commenters expressly reserve the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

Commenters incorporate by reference all comments raising issues regarding the environmental impact report (“**EIR**”) submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project’s environmental documentation may assert any issue timely raised by other parties).

Moreover, Commenters request that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (“**CEQA**”), Cal Public Resources Code (“**PRC**”) § 21000 *et seq*, and the California Planning and Zoning Law (“**Planning and Zoning Law**”), Cal. Gov’t Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency’s governing body.

The District should require the Applicant to provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The District should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

. . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California’s workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.<sup>1</sup>

Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the “[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component” can result in air pollutant reductions.<sup>2</sup>

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to “promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions.”<sup>3</sup>

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City “[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint

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<sup>1</sup> California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf>

<sup>2</sup> South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>

<sup>3</sup> City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* [https://www.hayward-ca.gov/sites/default/files/documents/General\\_Plan\\_FINAL.pdf](https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf).



labor-management training programs, . . .”<sup>4</sup> In addition, the City of Hayward requires all projects 30,000 square feet or larger to “utilize apprentices from state-approved, joint labor-management training programs.”<sup>5</sup>

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.<sup>6</sup>

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.<sup>7</sup> Some municipalities have tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing.” The city’s First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When

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<sup>4</sup> City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* <https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf>.

<sup>5</sup> City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

<sup>6</sup> California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* <https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf>

<sup>7</sup> Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? *Journal of the American Planning Association* 72 (4), 475-490, 482, *available at* <http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf>.



needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

The District should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

Also, the City should require the Project to be built to standards exceeding the current 2019 California Green Building Code and 2020 County of Los Angeles Green Building Standards Code to mitigate the Project’s environmental impacts and to advance progress towards the State of California’s environmental goals.

**I. THE NOTICE OF PREPARATION FAILS TO PROVIDE INFORMATION DESCRIBING THE PROJECT’S POTENTIAL ENVIRONMENTAL EFFECTS**

As a preliminary matter, Commenters note that the District’s NOP does not identify any particular environmental factors to be analyzed in its Draft EIR, leaving each checkbox of the “POTENTIAL ENVIRONMENTAL EFFECTS” section blank. While Commenters are optimistic that this means the District will analyze all such factors, CEQA Guidelines require that a notice of preparation must provide, at a minimum, information regarding the probable environmental effects of the project. 14 California Code of Regulations (“**CCR**” or “**CEQA Guidelines**”) § 15082(a)(1)(C).<sup>8</sup> In this way, the NOP itself is, unfortunately, deficient. The District must ensure that all potential environmental impacts of the Project are analyzed in the Draft EIR that is ultimately prepared.

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<sup>8</sup> The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 150000 et seq, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given “great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

## II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

### A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. CEQA Guidelines § 15002(a)(1). “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR ‘protects not only the environment but also informed self-government.’ [Citation.]” *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553; *Laurel Heights Improvement Ass’n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to “identify ways that environmental damage can be avoided or significantly reduced.” CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an “abuse of discretion” standard, “the reviewing court is not to ‘uncritically rely on every study or analysis presented by a project proponent in support of its position.’ A ‘clearly inadequate or unsupported study is entitled to no judicial deference.’” *Berkeley Jets*, 91 Cal. App. 4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal. 3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA’s information disclosure requirements presents a question of law subject to independent review by the courts.

(*Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131.) As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

A prejudicial abuse of discretion occurs “if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR’s function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, 449–450).

B. Due to the COVID-19 Crisis, the District Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.<sup>9</sup>

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<sup>9</sup> Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, available at <https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx>.

Southwest Carpenters recommend that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. Southwest Carpenters requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters's experience with safe construction site work practices, Southwest Carpenters recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

**Construction Site Design:**

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

**Testing Procedures:**

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.

- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

### **Planning**

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches)

communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.<sup>10</sup>

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment (“**ICRA**”) training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.<sup>11</sup>

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The District should require the Project to be built using a workforce trained in ICRA protocols.

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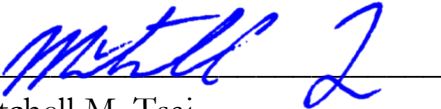
<sup>10</sup> See also The Center for Construction Research and Training, North America’s Building Trades Unions (April 27 2020) NABTU and CPWR COVID-19 Standards for U.S. Construction Sites, available at [https://www.cpwr.com/sites/default/files/NABTU\\_CPWR\\_Standards\\_COVID-19.pdf](https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf); Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at [https://dpw.lacounty.gov/building-and-safety/docs/pw\\_guidelines-construction-sites.pdf](https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf).

<sup>11</sup> For details concerning Southwest Carpenters’s ICRA training program, see <https://icrahealthcare.com/>.



If the City has any questions or concerns, feel free to contact my Office.

Sincerely,



Mitchell M. Tsai

Attorneys for Southwest Regional  
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and  
Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

**EXHIBIT A**



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2656 29<sup>th</sup> Street, Suite 201  
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.  
(949) 887-9013  
[mhagemann@swape.com](mailto:mhagemann@swape.com)

Paul E. Rosenfeld, PhD  
(310) 795-2335  
[prosenfeld@swape.com](mailto:prosenfeld@swape.com)

March 8, 2021

Mitchell M. Tsai  
155 South El Molino, Suite 104  
Pasadena, CA 91101

**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

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Dear Mr. Tsai,

Soil Water Air Protection Enterprise (“SWAPE”) is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas (“GHG”) emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

### Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model (“CalEEMod”) is a “statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects.”<sup>1</sup> CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.<sup>2</sup>

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>3</sup>

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<sup>1</sup> “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

<sup>2</sup> “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

<sup>3</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled (“VMT”) associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.<sup>4</sup>

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

$$\text{“VMT}_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$$

Where:

n = Number of land uses being modeled.”<sup>5</sup>

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

$$\text{“Emissions}_{\text{pollutant}} = \text{VMT} * \text{EF}_{\text{running,pollutant}}$$

Where:

Emissions<sub>pollutant</sub> = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

EF<sub>running,pollutant</sub> = emission factor for running emissions.”<sup>6</sup>

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

## Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>7</sup> In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act (“CEQA”) requires that such changes be justified by substantial evidence.<sup>8</sup> The default number of construction-related worker trips is calculated by multiplying the

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<sup>4</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 14-15.

<sup>5</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 23.

<sup>6</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 15.

<sup>7</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

<sup>8</sup> CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.<sup>9</sup> Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively.”<sup>10</sup> Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.<sup>11</sup> The operational home-to-work vehicle trip lengths are:

“[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings” (emphasis added).<sup>12</sup>

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).<sup>13</sup>

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
<b>Average</b>	<b>16.47</b>	<b>11.17</b>
<b>Minimum</b>	<b>10.80</b>	<b>10.80</b>
<b>Maximum</b>	<b>19.80</b>	<b>14.70</b>
<b>Range</b>	<b>9.00</b>	<b>3.90</b>

<sup>9</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

<sup>10</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 15.

<sup>11</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 14.

<sup>12</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 21.

<sup>13</sup> “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/05\\_appendix-d2016-3-2.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4), p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8- miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7- miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

### Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan (“Project”) located in the City of Claremont (“City”). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.<sup>14</sup> In an effort to evaluate the potential for a local hire provision to reduce the Project’s construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

<b>Local Hire Provision Net Change</b>	
<b>Without Local Hire Provision</b>	
Total Construction GHG Emissions (MT CO <sub>2</sub> e)	3,623
Amortized Construction GHG Emissions (MT CO <sub>2</sub> e/year)	120.77
<b>With Local Hire Provision</b>	
Total Construction GHG Emissions (MT CO <sub>2</sub> e)	3,024
Amortized Construction GHG Emissions (MT CO <sub>2</sub> e/year)	100.80
<b>% Decrease in Construction-related GHG Emissions</b>	<b>17%</b>

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project’s urbanization level and location.

<sup>14</sup> “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/05\\_appendix-d2016-3-2.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4), p. D-85.



## Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.



Paul E. Rosenfeld, Ph.D.

**EXHIBIT B**



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## ***Paul Rosenfeld, Ph.D.***

*Principal Environmental Chemist*

**Chemical Fate and Transport & Air Dispersion Modeling**

**Risk Assessment & Remediation Specialist**

### **Education**

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

### **Professional Experience**

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## **Professional History:**

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner  
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)  
UCLA School of Public Health; 2003 to 2006; Adjunct Professor  
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator  
UCLA Institute of the Environment, 2001-2002; Research Associate  
Komex H<sub>2</sub>O Science, 2001 to 2003; Senior Remediation Scientist  
National Groundwater Association, 2002-2004; Lecturer  
San Diego State University, 1999-2001; Adjunct Professor  
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager  
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager  
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor  
King County, Seattle, 1996 – 1999; Scientist  
James River Corp., Washington, 1995-96; Scientist  
Big Creek Lumber, Davenport, California, 1995; Scientist  
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist  
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

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**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.,** and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.,** C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 2010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## **Deposition and/or Trial Testimony:**

- In the United States District Court For The District of New Jersey  
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.  
Case No.: 2:17-cv-01624-ES-SCM  
Rosenfeld Deposition. 6-7-2019
- In the United States District Court of Southern District of Texas Galveston Division  
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”  
*Defendant*.  
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237  
Rosenfeld Deposition. 5-9-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica  
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants  
Case No.: No. BC615636  
Rosenfeld Deposition, 1-26-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica  
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants  
Case No.: No. BC646857  
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19
- In United States District Court For The District of Colorado  
Bells et al. Plaintiff vs. The 3M Company et al., Defendants  
Case: No 1:16-cv-02531-RBJ  
Rosenfeld Deposition, 3-15-2018 and 4-3-2018
- In The District Court Of Regan County, Texas, 112<sup>th</sup> Judicial District  
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants  
Cause No 1923  
Rosenfeld Deposition, 11-17-2017
- In The Superior Court of the State of California In And For The County Of Contra Costa  
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants  
Cause No C12-01481  
Rosenfeld Deposition, 11-20-2017
- In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois  
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants  
Case No.: No. 0i9-L-2295  
Rosenfeld Deposition, 8-23-2017
- In The Superior Court of the State of California, For The County of Los Angeles  
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC  
Case No.: LC102019 (c/w BC582154)  
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018
- In the Northern District Court of Mississippi, Greenville Division  
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*  
Case Number: 4:16-cv-52-DMB-JVM  
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish  
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants  
Case No.: No. 13-2-03987-5  
Rosenfeld Deposition, February 2017  
Trial, March 2017

In The Superior Court of the State of California, County of Alameda  
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants  
Case No.: RG14711115  
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County  
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants  
Case No.: LALA002187  
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County  
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants  
Law No.: LALA105144 - Division A  
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County  
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants  
Law No.: LALA105144 - Division A  
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia  
Robert Andrews, et al. v. Antero, et al.  
Civil Action NO. 14-C-30000  
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico  
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward  
DeRuyter, Defendants  
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County  
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant  
Case No 4980  
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17<sup>th</sup> Judicial Circuit, in and For Broward County, Florida  
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.  
Case Number CACE07030358 (26)  
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma  
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City  
Landfill, et al. Defendants.  
Case No. 5:12-cv-01152-C  
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas  
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.  
Case Number cc-11-01650-E  
Rosenfeld Deposition: March and September 2013  
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio  
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*  
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)  
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division  
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.  
Case 3:10-cv-00622  
Rosenfeld Deposition: February 2012  
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland  
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants  
Case Number: 03-C-12-012487 OT  
Rosenfeld Deposition: September 2013



**EXHIBIT C**



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**Matthew F. Hagemann, P.G., C.Hg., QSD, QSP**

**Geologic and Hydrogeologic Characterization  
Industrial Stormwater Compliance  
Investigation and Remediation Strategies  
Litigation Support and Testifying Expert  
CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

### **Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

### **Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.



### **Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

### **Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

### **Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.**, 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F.**, 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F.**, 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F.**, and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F.**, 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F.**, 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F.**, and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F.**, Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F.**, Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F.**, 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.F.** and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F.**, 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F.**, 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

## **Appendix B      Air Quality and GHG Emissions Data**

## Appendices

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# 1. Criteria Air Pollutant and GHG Emissions Worksheets

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# Regional Construction Emissions Worksheet - Unmitigated

\*CalEEMod, Version 2020.4.0

P1 Demolition			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
			<b>2026 Summer</b>					
Onsite	Fugitive Dust						1.3503	0.2044
	Off-Road		2.0926	19.1966	19.4184	0.0388	0.8528	0.792
	Total		<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>	<b>2.203</b>	<b>0.9964</b>
Offsite	Hauling		3.45E-02	1.5888	0.4919	7.76E-03	0.2565	8.21E-02
	Vendor		4.41E-03	0.1397	0.0562	6.80E-04	0.025	7.96E-03
	Worker		0.0474	0.0253	0.4575	1.36E-03	0.1553	0.0419
	Total		<b>0.0864</b>	<b>1.7537</b>	<b>1.0057</b>	<b>9.80E-03</b>	<b>0.4367</b>	<b>0.132</b>
<b>TOTAL</b>			<b>2.18</b>	<b>20.95</b>	<b>20.42</b>	<b>0.05</b>	<b>2.64</b>	<b>1.13</b>
			<b>2026 Winter</b>					
Onsite	Fugitive Dust						1.3503	0.2044
	Off-Road		2.0926	19.1966	19.4184	0.0388	0.8528	0.792
	Total		<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>	<b>2.203</b>	<b>0.9964</b>
Offsite	Hauling		3.19E-02	1.675	0.5007	7.78E-03	0.2565	8.22E-02
	Vendor		4.08E-03	0.1475	0.058	6.80E-04	0.025	7.97E-03
	Worker		0.046	0.0266	0.3778	1.23E-03	0.1553	0.0419
	Total		<b>0.082</b>	<b>1.8491</b>	<b>0.9365</b>	<b>9.69E-03</b>	<b>0.4368</b>	<b>0.132</b>
<b>TOTAL</b>			<b>2.17</b>	<b>21.05</b>	<b>20.35</b>	<b>0.05</b>	<b>2.64</b>	<b>1.04</b>
			<b>2026</b>					
Onsite	Fugitive Dust		0.00	0.00	0.00	0.00	1.35	0.20
	Off-Road		2.09	19.20	19.42	0.04	0.85	0.79
	Total		<b>2.09</b>	<b>19.20</b>	<b>19.42</b>	<b>0.04</b>	<b>2.20</b>	<b>1.00</b>
Offsite	Hauling		0.03	1.68	0.50	0.01	0.26	0.08
	Vendor		0.00	0.15	0.06	0.00	0.03	0.01
	Worker		0.05	0.03	0.46	0.00	0.16	0.04
	Total		<b>0.09</b>	<b>1.85</b>	<b>1.01</b>	<b>0.01</b>	<b>0.44</b>	<b>0.13</b>
<b>TOTAL</b>			<b>2.18</b>	<b>21.05</b>	<b>20.42</b>	<b>0.05</b>	<b>2.64</b>	<b>1.13</b>

P1 Site Preparation			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
			<b>2026 Summer</b>					
Onsite	Fugitive Dust						8.4034	4.3188
	Off-Road		2.4727	25.2339	17.9118	0.0381	1.0868	0.9999
	Total		<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>9.4902</b>	<b>5.3187</b>
Offsite	Hauling		0	0	0	0	0	0
	Vendor		8.82E-03	0.2793	0.1125	1.36E-03	0.05	0.0159
	Worker		0.0569	0.0304	0.549	1.63E-03	0.1863	0.0503
	Total		<b>0.0658</b>	<b>0.3097</b>	<b>0.6614</b>	<b>2.99E-03</b>	<b>0.2364</b>	<b>0.0662</b>
<b>TOTAL</b>			<b>2.54</b>	<b>25.54</b>	<b>18.57</b>	<b>0.04</b>	<b>9.73</b>	<b>5.38</b>
			<b>2026 Winter</b>					
Onsite	Fugitive Dust						8.4034	4.3188
	Off-Road		2.4727	25.2339	17.9118	0.0381	1.0868	0.9999
	Total		<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>9.4902</b>	<b>5.3187</b>
Offsite	Hauling		0	0	0	0	0	0

	Vendor	8.16E-03	0.2951	0.116	1.36E-03	0.05	0.0159
	Worker	0.0552	0.0319	0.4534	1.48E-03	0.1863	0.0503
	Total	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.84E-03</b>	<b>0.2364</b>	<b>0.0662</b>
<b>TOTAL</b>		<b>2.54</b>	<b>25.56</b>	<b>18.48</b>	<b>0.04</b>	<b>9.73</b>	<b>5.37</b>
Onsite	<b>2026</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	8.40	4.32
	Off-Road	2.47	25.23	17.91	0.04	1.09	1.00
	Total	<b>2.47</b>	<b>25.23</b>	<b>17.91</b>	<b>0.04</b>	<b>9.49</b>	<b>5.32</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.30	0.12	0.00	0.05	0.02
	Worker	0.06	0.03	0.55	0.00	0.19	0.05
	Total	<b>0.07</b>	<b>0.33</b>	<b>0.66</b>	<b>0.00</b>	<b>0.24</b>	<b>0.07</b>
<b>TOTAL</b>		<b>2.54</b>	<b>25.56</b>	<b>18.57</b>	<b>0.04</b>	<b>9.73</b>	<b>5.38</b>

### P1 Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2026 Summer</b>						
	Fugitive Dust					3.9345	1.562
	Off-Road	2.9012	27.9429	26.3311	0.0621	1.1309	1.0404
	Total	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>5.0654</b>	<b>2.6024</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0176	0.5587	0.2249	2.71E-03	0.1001	0.0319
	Worker	0.0633	0.0337	0.61	1.81E-03	0.207	0.0559
	Total	<b>0.0809</b>	<b>0.5924</b>	<b>0.8349</b>	<b>4.52E-03</b>	<b>0.3071</b>	<b>0.0877</b>
<b>TOTAL</b>		<b>2.98</b>	<b>28.54</b>	<b>27.17</b>	<b>0.07</b>	<b>5.37</b>	<b>2.69</b>
Onsite	<b>2026 Winter</b>						
	Fugitive Dust					3.9345	1.562
	Off-Road	2.9012	27.9429	26.3311	0.0621	1.1309	1.0404
	Total	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>5.0654</b>	<b>2.6024</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0163	0.5901	0.232	2.72E-03	0.1001	0.0319
	Worker	0.0614	0.0354	0.5037	1.64E-03	0.207	0.0559
	Total	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.36E-03</b>	<b>0.3071</b>	<b>0.0877</b>
<b>TOTAL</b>		<b>2.98</b>	<b>28.57</b>	<b>27.07</b>	<b>0.07</b>	<b>5.37</b>	<b>2.66</b>
Onsite	<b>2026</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	3.93	1.56
	Off-Road	2.90	27.94	26.33	0.06	1.13	1.04
	Total	<b>2.90</b>	<b>27.94</b>	<b>26.33</b>	<b>0.06</b>	<b>5.07</b>	<b>2.60</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.59	0.23	0.00	0.10	0.03
	Worker	0.06	0.04	0.61	0.00	0.21	0.06
	Total	<b>0.08</b>	<b>0.63</b>	<b>0.83</b>	<b>0.00</b>	<b>0.31</b>	<b>0.09</b>
<b>TOTAL</b>		<b>2.98</b>	<b>28.57</b>	<b>27.17</b>	<b>0.07</b>	<b>5.37</b>	<b>2.69</b>

### P1 Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2026 Summer</b>						
	Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963
	Total	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.027</b>	<b>0.5276</b>	<b>0.4963</b>
Offsite							
	Hauling	0	0	0	0	0	0

	Vendor	0.1256	3.9804	1.6025	1.93E-02	0.7129	0.2269
	Worker	0.9267	0.494	8.936	0.0266	3.0328	0.8186
	Total	1.0523	4.4744	10.5386	0.0459	3.7458	1.0455
<b>TOTAL</b>		<b>2.42</b>	<b>16.94</b>	<b>26.62</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

Onsite	<b>2026 Winter</b>						
Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963	
Total	1.3674	12.4697	16.0847	0.027	0.5276	0.4963	

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.1163	4.2045	1.6529	1.94E-02	0.713	0.227
	Worker	0.8992	0.5189	7.3797	0.0241	3.0328	0.8186
	Total	1.0154	4.7233	9.0326	0.0435	3.7459	1.0456
<b>TOTAL</b>		<b>2.38</b>	<b>17.19</b>	<b>25.12</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

Onsite	<b>2026</b>						
Off-Road	1.37	12.47	16.08	0.03	0.53	0.50	
Total	1.37	12.47	16.08	0.03	0.53	0.50	

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.13	4.20	1.65	0.02	0.71	0.23
	Worker	0.93	0.52	8.94	0.03	3.03	0.82
	Total	1.05	4.72	10.54	0.05	3.75	1.05
<b>TOTAL</b>		<b>2.42</b>	<b>17.19</b>	<b>26.62</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2027 Summer</b>						
Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963	
Total	1.3674	12.4697	16.0847	0.027	0.5276	0.4963	
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.1237	3.9505	1.584	1.89E-02	0.7127	0.2267
	Worker	0.8682	0.4485	8.4114	0.0258	3.032	0.8178
	Total	0.9919	4.399	9.9954	0.0447	3.7447	1.0445
<b>TOTAL</b>		<b>2.36</b>	<b>16.87</b>	<b>26.08</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

Onsite	<b>2027 Winter</b>						
Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963	
Total	1.3674	12.4697	16.0847	0.027	0.5276	0.4963	

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.1143	4.1732	1.634	1.90E-02	0.7128	0.2268
	Worker	0.8442	0.4709	6.9518	2.34E-02	3.032	0.8178
	Total	0.9585	4.6441	8.5858	0.0424	3.7448	1.0446
<b>TOTAL</b>		<b>2.33</b>	<b>17.11</b>	<b>24.67</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

Onsite	<b>2027</b>						
Off-Road	1.37	12.47	16.08	0.03	0.53	0.50	
Total	1.37	12.47	16.08	0.03	0.53	0.50	

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.12	4.17	1.63	0.02	0.71	0.23
	Worker	0.87	0.47	8.41	0.03	3.03	0.82
	Total	0.99	4.64	10.00	0.04	3.74	1.04
<b>TOTAL</b>		<b>2.36</b>	<b>17.11</b>	<b>26.08</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

**P1 Paving**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2027 Summer</b>					
	Off-Road	0.9152	8.5816	14.578	0.0228	0.4185	0.385
	Paving	1.6611				0	0
	<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.578</b>	<b>0.0228</b>	<b>0.4185</b>	<b>0.385</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0445	0.023	0.4306	1.32E-03	0.1552	0.0419
	<b>Total</b>	<b>0.0445</b>	<b>0.023</b>	<b>0.4306</b>	<b>1.32E-03</b>	<b>0.1552</b>	<b>0.0419</b>
<b>TOTAL</b>		<b>2.62</b>	<b>8.60</b>	<b>15.01</b>	<b>0.02</b>	<b>0.57</b>	<b>0.43</b>

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2027 Winter</b>					
	Off-Road	0.9152	8.5816	14.578	0.0228	0.4185	0.385
	Paving	1.6611				0	0
	<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.578</b>	<b>0.0228</b>	<b>0.4185</b>	<b>0.385</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0432	0.0241	0.3559	1.20E-03	0.1552	0.0419
	<b>Total</b>	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.20E-03</b>	<b>0.1552</b>	<b>0.0419</b>
<b>TOTAL</b>		<b>2.62</b>	<b>8.61</b>	<b>14.93</b>	<b>0.02</b>	<b>0.57</b>	<b>0.43</b>

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2027</b>					
	Off-Road	0.92	8.58	14.58	0.02	0.42	0.39
	Paving	1.66	0.00	0.00	0.00	0.00	0.00
	<b>Total</b>	<b>2.58</b>	<b>8.58</b>	<b>14.58</b>	<b>0.02</b>	<b>0.42</b>	<b>0.39</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.43	0.00	0.16	0.04
	<b>Total</b>	<b>0.04</b>	<b>0.02</b>	<b>0.43</b>	<b>0.00</b>	<b>0.16</b>	<b>0.04</b>
<b>TOTAL</b>		<b>2.62</b>	<b>8.61</b>	<b>15.01</b>	<b>0.02</b>	<b>0.57</b>	<b>0.43</b>

**P1 Architectural Coating**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2027 Summer</b>					
	Archit. Coating	71.6358				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	<b>Total</b>	<b>71.8066</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.97E-03</b>	<b>0.0515</b>	<b>0.0515</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.1748	0.0903	1.6938	5.19E-03	0.6105	0.1647
	<b>Total</b>	<b>0.1748</b>	<b>0.0903</b>	<b>1.6938</b>	<b>5.19E-03</b>	<b>0.6105</b>	<b>0.1647</b>
<b>TOTAL</b>		<b>71.98</b>	<b>1.24</b>	<b>3.50</b>	<b>0.01</b>	<b>0.66</b>	<b>0.22</b>

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2027 Winter</b>					
	Archit. Coating	71.6358				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	<b>Total</b>	<b>71.8066</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.97E-03</b>	<b>0.0515</b>	<b>0.0515</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.17	0.0948	1.3999	4.71E-03	0.6105	0.1647
	<b>Total</b>	<b>0.17</b>	<b>0.0948</b>	<b>1.3999</b>	<b>4.71E-03</b>	<b>0.6105</b>	<b>0.1647</b>
<b>TOTAL</b>		<b>71.98</b>	<b>1.24</b>	<b>3.21</b>	<b>0.01</b>	<b>0.66</b>	<b>0.22</b>

		<b>2027</b>					
Onsite	Archit. Coating	71.64	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.17	1.15	1.81	0.00	0.05	0.05
	<b>Total</b>	<b>71.81</b>	<b>1.15</b>	<b>1.81</b>	<b>0.00</b>	<b>0.05</b>	<b>0.05</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.17	0.09	1.69	0.01	0.61	0.16
	<b>Total</b>	<b>0.17</b>	<b>0.09</b>	<b>1.69</b>	<b>0.01</b>	<b>0.61</b>	<b>0.16</b>
<b>TOTAL</b>		<b>71.98</b>	<b>1.24</b>	<b>3.50</b>	<b>0.01</b>	<b>0.66</b>	<b>0.22</b>

<b>Phase 1 All Activities Overlap</b>		<b>84.72</b>	<b>102.21</b>	<b>111.30</b>	<b>0.26</b>	<b>23.25</b>	<b>11.39</b>
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**P2 Demolition**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		<b>2030 Summer</b>					
Onsite	Fugitive Dust					1.6974	0.257
	Off-Road	1.3307	8.0078	12.9685	0.0281	0.2148	0.2148
	<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>1.9122</b>	<b>0.4718</b>
Offsite	Hauling	0.0421	1.9157	0.6083	8.86E-03	0.3203	0.1021
	Vendor	4.20E-03	0.1364	0.0543	6.30E-04	0.025	7.94E-03
	Worker	0.0317	0.0155	0.3226	1.06E-03	0.1344	0.0362
	<b>Total</b>	<b>0.078</b>	<b>2.0677</b>	<b>0.9851</b>	<b>1.06E-02</b>	<b>0.4797</b>	<b>0.1463</b>
<b>TOTAL</b>		<b>1.41</b>	<b>10.08</b>	<b>13.95</b>	<b>0.04</b>	<b>2.39</b>	<b>0.62</b>

		<b>2030 Winter</b>					
Onsite	Fugitive Dust					1.6974	0.257
	Off-Road	1.3307	8.0078	12.9685	0.0281	0.2148	0.2148
	<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>1.9122</b>	<b>0.4718</b>
Offsite	Hauling	0.0388	2.0205	0.6191	8.87E-03	0.3203	0.1022
	Vendor	3.87E-03	0.1442	0.056	6.30E-04	0.025	7.94E-03
	Worker	0.031	0.0163	0.267	9.60E-04	0.1344	0.0362
	<b>Total</b>	<b>0.0737</b>	<b>2.1809</b>	<b>0.942</b>	<b>1.05E-02</b>	<b>0.4797</b>	<b>0.1463</b>
<b>TOTAL</b>		<b>1.40</b>	<b>10.19</b>	<b>13.91</b>	<b>0.04</b>	<b>2.39</b>	<b>0.51</b>

		<b>2030</b>					
Onsite	Fugitive Dust	0.00	0.00	0.00	0.00	1.70	0.26
	Off-Road	1.33	8.01	12.97	0.03	0.21	0.21
	<b>Total</b>	<b>1.33</b>	<b>8.01</b>	<b>12.97</b>	<b>0.03</b>	<b>1.91</b>	<b>0.47</b>
Offsite	Hauling	0.04	2.02	0.62	0.01	0.32	0.10
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.03	0.02	0.32	0.00	0.13	0.04
	<b>Total</b>	<b>0.08</b>	<b>2.18</b>	<b>0.99</b>	<b>0.01</b>	<b>0.48</b>	<b>0.15</b>
<b>TOTAL</b>		<b>1.41</b>	<b>10.19</b>	<b>13.95</b>	<b>0.04</b>	<b>2.39</b>	<b>0.62</b>

**P2 Site Preparation**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		<b>2030 Summer</b>					
Onsite	Fugitive Dust					2.6788	1.2843
	Off-Road	0.975	4.7401	5.9133	0.0211	0.1567	0.1567
	<b>Total</b>	<b>0.975</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>2.8355</b>	<b>1.4409</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	4.20E-03	0.1364	0.0543	6.30E-04	0.025	7.94E-03

	Worker	0.0195	9.54E-03	0.1985	6.50E-04	0.0827	0.0223
	Total	<b>0.0237</b>	<b>0.146</b>	<b>0.2528</b>	<b>1.28E-03</b>	<b>0.1077</b>	<b>0.0302</b>
<b>TOTAL</b>		<b>1.00</b>	<b>4.89</b>	<b>6.17</b>	<b>0.02</b>	<b>2.94</b>	<b>1.47</b>

Onsite	<b>2030 Winter</b>						
	Fugitive Dust					2.6788	1.2843
	Off-Road	0.975	4.7401	5.9133	0.0211	0.1567	0.1567
	Total	<b>0.975</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>2.8355</b>	<b>1.4409</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	3.87E-03	0.1442	0.056	6.30E-04	0.025	7.94E-03
	Worker	0.0191	0.01	0.1643	5.90E-04	0.0827	0.0223
	Total	<b>0.0229</b>	<b>0.1542</b>	<b>0.2203</b>	<b>1.22E-03</b>	<b>0.1077</b>	<b>0.0302</b>
<b>TOTAL</b>		<b>1.00</b>	<b>4.89</b>	<b>6.13</b>	<b>0.02</b>	<b>2.94</b>	<b>1.46</b>

Onsite	<b>2030</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	2.68	1.28
	Off-Road	0.98	4.74	5.91	0.02	0.16	0.16
	Total	<b>0.98</b>	<b>4.74</b>	<b>5.91</b>	<b>0.02</b>	<b>2.84</b>	<b>1.44</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.02	0.01	0.20	0.00	0.08	0.02
	Total	<b>0.02</b>	<b>0.15</b>	<b>0.25</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>		<b>1.00</b>	<b>4.89</b>	<b>6.17</b>	<b>0.02</b>	<b>2.94</b>	<b>1.47</b>

**P2 Grading**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2030 Summer</b>						
	Fugitive Dust					3.0278	1.4641
	Off-Road	1.1771	5.9092	7.9601	0.0252	0.1859	0.1859
	Total	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>3.2137</b>	<b>1.65</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	6.30E-03	0.2046	0.0814	9.40E-04	0.0375	1.19E-02
	Worker	0.0244	1.19E-02	0.2481	8.20E-04	0.1034	0.0278
	Total	<b>0.0307</b>	<b>0.2166</b>	<b>0.3295</b>	<b>1.76E-03</b>	<b>0.1409</b>	<b>0.0397</b>
<b>TOTAL</b>		<b>1.21</b>	<b>6.13</b>	<b>8.29</b>	<b>0.03</b>	<b>3.35</b>	<b>1.69</b>

Onsite	<b>2030 Winter</b>						
	Fugitive Dust					3.0278	1.4641
	Off-Road	1.1771	5.9092	7.9601	0.0252	0.1859	0.1859
	Total	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>3.2137</b>	<b>1.65</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	5.80E-03	0.2162	0.084	9.40E-04	0.0375	1.19E-02
	Worker	0.0238	0.0125	0.2054	7.40E-04	0.1034	0.0278
	Total	<b>0.0296</b>	<b>0.2287</b>	<b>0.2894</b>	<b>1.68E-03</b>	<b>0.1409</b>	<b>0.0397</b>
<b>TOTAL</b>		<b>1.21</b>	<b>6.14</b>	<b>8.25</b>	<b>0.03</b>	<b>3.35</b>	<b>1.68</b>

Onsite	<b>2030</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	3.03	1.46
	Off-Road	1.18	5.91	7.96	0.03	0.19	0.19
	Total	<b>1.18</b>	<b>5.91</b>	<b>7.96</b>	<b>0.03</b>	<b>3.21</b>	<b>1.65</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.22	0.08	0.00	0.04	0.01

	Worker	0.02	0.01	0.25	0.00	0.10	0.03
	Total	<b>0.03</b>	<b>0.23</b>	<b>0.33</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>
<b>TOTAL</b>		<b>1.21</b>	<b>6.14</b>	<b>8.29</b>	<b>0.03</b>	<b>3.35</b>	<b>1.69</b>

**P2 Building Construction**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2030 Summer</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	Total	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0231	0.7503	0.2985	3.44E-03	0.1375	0.0437
	Worker	0.1341	0.0656	1.3647	4.49E-03	0.5687	0.1531
	Total	<b>0.1572</b>	<b>0.8159</b>	<b>1.6632</b>	<b>7.93E-03</b>	<b>0.7061</b>	<b>0.1968</b>
<b>TOTAL</b>		<b>1.24</b>	<b>8.00</b>	<b>13.77</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

Onsite	<b>2030 Winter</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	Total	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0213	0.7928	0.308	3.45E-03	0.1375	0.0437
	Worker	0.1311	0.0688	1.1295	4.07E-03	0.5687	0.1531
	Total	<b>0.1523</b>	<b>0.8616</b>	<b>1.4374</b>	<b>7.52E-03</b>	<b>0.7062</b>	<b>0.1968</b>
<b>TOTAL</b>		<b>1.23</b>	<b>8.05</b>	<b>13.55</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

Onsite	<b>2030</b>						
	Off-Road	1.08	7.19	12.11	0.02	0.13	0.13
	Total	<b>1.08</b>	<b>7.19</b>	<b>12.11</b>	<b>0.02</b>	<b>0.13</b>	<b>0.13</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.79	0.31	0.00	0.14	0.04
	Worker	0.13	0.07	1.36	0.00	0.57	0.15
	Total	<b>0.16</b>	<b>0.86</b>	<b>1.66</b>	<b>0.01</b>	<b>0.71</b>	<b>0.20</b>
<b>TOTAL</b>		<b>1.24</b>	<b>8.05</b>	<b>13.77</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2031 Summer</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	Total	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.023	0.7497	0.2977	3.39E-03	0.1373	0.0436
	Worker	0.1253	0.061	1.3195	4.41E-03	0.5686	0.153
	Total	<b>0.1483</b>	<b>0.8107</b>	<b>1.6172</b>	<b>7.80E-03</b>	<b>0.7059</b>	<b>0.1965</b>
<b>TOTAL</b>		<b>1.23</b>	<b>8.00</b>	<b>13.73</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

Onsite	<b>2031 Winter</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	Total	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0211	0.7922	0.3071	3.40E-03	0.1373	0.0436
	Worker	0.1227	0.0639	1.0919	3.99E-03	0.5686	0.153
	Total	<b>0.1438</b>	<b>0.8561</b>	<b>1.399</b>	<b>7.39E-03</b>	<b>0.7059</b>	<b>0.1965</b>
<b>TOTAL</b>		<b>1.23</b>	<b>8.04</b>	<b>13.51</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

		<b>2031</b>					
Onsite	Off-Road	1.08	7.19	12.11	0.02	0.13	0.13
	Total	<b>1.08</b>	<b>7.19</b>	<b>12.11</b>	<b>0.02</b>	<b>0.13</b>	<b>0.13</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.79	0.31	0.00	0.14	0.04
	Worker	0.13	0.06	1.32	0.00	0.57	0.15
	Total	<b>0.15</b>	<b>0.86</b>	<b>1.62</b>	<b>0.01</b>	<b>0.71</b>	<b>0.20</b>
<b>TOTAL</b>		<b>1.23</b>	<b>8.04</b>	<b>13.73</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

### P2 Paving

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2031 Summer</b>						
	Off-Road	0.8162	4.3905	9.4567	0.0165	0.1728	0.1728
	Paving	0				0	0
	Total	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>	<b>0.1728</b>	<b>0.1728</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0296	0.0144	0.3119	1.04E-03	0.1344	0.0362
	Total	<b>0.0296</b>	<b>0.0144</b>	<b>0.3119</b>	<b>1.04E-03</b>	<b>0.1344</b>	<b>0.0362</b>
<b>TOTAL</b>		<b>0.85</b>	<b>4.40</b>	<b>9.77</b>	<b>0.02</b>	<b>0.31</b>	<b>0.21</b>

Onsite	<b>2031 Winter</b>						
	Off-Road	0.8162	4.3905	9.4567	0.0165	0.1728	0.1728
	Paving	0				0	0
	Total	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>	<b>0.1728</b>	<b>0.1728</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.029	0.0151	0.2581	9.40E-04	0.1344	0.0362
	Total	<b>0.029</b>	<b>0.0151</b>	<b>0.2581</b>	<b>9.40E-04</b>	<b>0.1344</b>	<b>0.0362</b>
<b>TOTAL</b>		<b>0.85</b>	<b>4.41</b>	<b>9.71</b>	<b>0.02</b>	<b>0.31</b>	<b>0.21</b>

		<b>2031</b>					
Onsite	Off-Road	0.82	4.39	9.46	0.02	0.17	0.17
	Paving	0.00	0.00	0.00	0.00	0.00	0.00
	Total	<b>0.82</b>	<b>4.39</b>	<b>9.46</b>	<b>0.02</b>	<b>0.17</b>	<b>0.17</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.03	0.02	0.31	0.00	0.13	0.04
	Total	<b>0.03</b>	<b>0.02</b>	<b>0.31</b>	<b>0.00</b>	<b>0.13</b>	<b>0.04</b>
<b>TOTAL</b>		<b>0.85</b>	<b>4.41</b>	<b>9.77</b>	<b>0.02</b>	<b>0.31</b>	<b>0.21</b>

### P2 Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2031 Summer</b>						
	Archit. Coating	121.9816				0	0
	Off-Road	0.1308	0.8563	1.7977	2.97E-03	0.0203	0.0203
	Total	<b>122.1124</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.97E-03</b>	<b>0.0203</b>	<b>0.0203</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0251	0.0122	0.2639	8.80E-04	0.1137	0.0306
	Total	<b>0.0251</b>	<b>0.0122</b>	<b>0.2639</b>	<b>8.80E-04</b>	<b>0.1137</b>	<b>0.0306</b>
<b>TOTAL</b>		<b>122.14</b>	<b>0.87</b>	<b>2.06</b>	<b>0.00</b>	<b>0.13</b>	<b>0.05</b>



		<b>2031 Winter</b>					
Onsite	Archit. Coating	121.9816				0	0
	Off-Road	0.1308	0.8563	1.7977	2.97E-03	0.0203	0.0203
	<b>Total</b>	<b>122.1124</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.97E-03</b>	<b>0.0203</b>	<b>0.0203</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0245	0.0128	0.2184	8.00E-04	0.1137	0.0306
	<b>Total</b>	<b>0.0245</b>	<b>0.0128</b>	<b>0.2184</b>	<b>8.00E-04</b>	<b>0.1137</b>	<b>0.0306</b>
<b>TOTAL</b>	<b>122.14</b>	<b>0.87</b>	<b>2.02</b>	<b>0.00</b>	<b>0.13</b>	<b>0.05</b>	
		<b>2031</b>					
Onsite	Archit. Coating	121.98	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.13	0.86	1.80	0.00	0.02	0.02
	<b>Total</b>	<b>122.11</b>	<b>0.86</b>	<b>1.80</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.03	0.01	0.26	0.00	0.11	0.03
	<b>Total</b>	<b>0.03</b>	<b>0.01</b>	<b>0.26</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>	<b>122.14</b>	<b>0.87</b>	<b>2.06</b>	<b>0.00</b>	<b>0.13</b>	<b>0.05</b>	
<b>Phase 2 All Activities Overlap</b>		<b>127.84</b>	<b>34.55</b>	<b>54.01</b>	<b>0.14</b>	<b>9.96</b>	<b>4.36</b>

### P3 Site Preparation

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		<b>2038 Summer</b>					
Onsite	Fugitive Dust					2.27E-01	2.45E-02
	Off-Road	4.28E-01	1.57E+00	3.88E+00	1.19E-02	3.43E-02	3.43E-02
	<b>Total</b>	<b>4.28E-01</b>	<b>1.57E+00</b>	<b>3.88E+00</b>	<b>1.19E-02</b>	<b>2.61E-01</b>	<b>5.88E-02</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	2.07E-03	6.73E-02	2.70E-02	2.90E-04	1.25E-02	3.95E-03
	Worker	8.95E-03	4.47E-03	1.06E-01	3.80E-04	5.17E-02	1.39E-02
	<b>Total</b>	<b>0.011</b>	<b>7.18E-02</b>	<b>1.33E-01</b>	<b>6.70E-04</b>	<b>6.41E-02</b>	<b>1.78E-02</b>
<b>TOTAL</b>	<b>0.44</b>	<b>1.65</b>	<b>4.01</b>	<b>0.01</b>	<b>0.33</b>	<b>0.08</b>	
		<b>2038 Winter</b>					
Onsite	Fugitive Dust					0.2267	0.0245
	Off-Road	0.4284	1.574	3.8815	0.0119	0.0343	0.0343
	<b>Total</b>	<b>0.4284</b>	<b>1.574</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.261</b>	<b>0.0588</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	1.90E-03	0.0711	0.0278	2.90E-04	0.0125	3.95E-03
	Worker	8.83E-03	4.68E-03	0.088	3.40E-04	0.0517	0.0139
	<b>Total</b>	<b>0.0107</b>	<b>0.0758</b>	<b>0.1158</b>	<b>6.30E-04</b>	<b>0.0641</b>	<b>0.0178</b>
<b>TOTAL</b>	<b>0.44</b>	<b>1.65</b>	<b>4.00</b>	<b>0.01</b>	<b>0.33</b>	<b>0.07</b>	
		<b>2038</b>					
Onsite	Fugitive Dust	0.00	0.00	0.00	0.00	0.23	0.02
	Off-Road	0.43	1.57	3.88	0.01	0.03	0.03
	<b>Total</b>	<b>0.43</b>	<b>1.57</b>	<b>3.88</b>	<b>0.01</b>	<b>0.26</b>	<b>0.06</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.07	0.03	0.00	0.01	0.00
	Worker	0.01	0.00	0.11	0.00	0.05	0.01

	Total	<b>0.01</b>	<b>0.08</b>	<b>0.13</b>	<b>0.00</b>	<b>0.06</b>	<b>0.02</b>
<b>TOTAL</b>		<b>0.44</b>	<b>1.65</b>	<b>4.01</b>	<b>0.01</b>	<b>0.33</b>	<b>0.08</b>

### P3 Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2038 Summer</b>					
	Fugitive Dust					2.27E+00	1.10E+00
	Off-Road	7.16E-01	2.87E+00	4.85E+00	1.73E-02	8.74E-02	8.74E-02
	Total	<b>7.16E-01</b>	<b>2.87E+00</b>	<b>4.85E+00</b>	<b>1.73E-02</b>	<b>2.36E+00</b>	<b>1.19E+00</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	4.13E-03	1.35E-01	5.40E-02	5.80E-04	2.50E-02	7.90E-03
	Worker	1.43E-02	7.15E-03	1.70E-01	6.00E-04	8.26E-02	2.22E-02
	Total	<b>1.85E-02</b>	<b>1.42E-01</b>	<b>2.24E-01</b>	<b>1.18E-03</b>	<b>1.08E-01</b>	<b>3.01E-02</b>
<b>TOTAL</b>		<b>0.73</b>	<b>3.01</b>	<b>5.08</b>	<b>0.02</b>	<b>2.47</b>	<b>1.22</b>

Onsite		<b>2038 Winter</b>					
	Fugitive Dust					2.2709	1.0981
	Off-Road	0.7155	2.873	4.8534	0.0173	0.0874	0.0874
	Total	<b>0.7155</b>	<b>2.873</b>	<b>4.8534</b>	<b>0.0173</b>	<b>2.3583</b>	<b>1.1855</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	3.79E-03	0.1423	0.0557	5.90E-04	0.025	7.91E-03
	Worker	0.0141	7.49E-03	0.1408	5.50E-04	0.0826	0.0222
	Total	<b>0.0179</b>	<b>0.1498</b>	<b>0.1964</b>	<b>1.14E-03</b>	<b>0.1076</b>	<b>0.0301</b>
<b>TOTAL</b>		<b>0.73</b>	<b>3.02</b>	<b>5.05</b>	<b>0.02</b>	<b>2.47</b>	<b>1.21</b>

Onsite		<b>2038</b>					
	Fugitive Dust	0.00	0.00	0.00	0.00	2.27	1.10
	Off-Road	0.72	2.87	4.85	0.02	0.09	0.09
	Total	<b>0.72</b>	<b>2.87</b>	<b>4.85</b>	<b>0.02</b>	<b>2.36</b>	<b>1.19</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.01	0.01	0.17	0.00	0.08	0.02
	Total	<b>0.02</b>	<b>0.15</b>	<b>0.22</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>		<b>0.73</b>	<b>3.02</b>	<b>5.08</b>	<b>0.02</b>	<b>2.47</b>	<b>1.22</b>

### P3 Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2038 Summer</b>					
	Off-Road	0.5761	2.9031	7.1465	1.40E-02	4.23E-02	4.23E-02
	Total	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>1.40E-02</b>	<b>4.23E-02</b>	<b>4.23E-02</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	8.26E-03	0.2692	1.08E-01	1.17E-03	4.99E-02	1.58E-02
	Worker	3.76E-02	1.88E-02	0.4463	1.58E-03	0.2169	5.83E-02
	Total	<b>4.58E-02</b>	<b>0.288</b>	<b>0.5542</b>	<b>2.75E-03</b>	<b>0.2668</b>	<b>7.41E-02</b>
<b>TOTAL</b>		<b>0.62</b>	<b>3.19</b>	<b>7.70</b>	<b>0.02</b>	<b>0.31</b>	<b>0.12</b>

Onsite		<b>2038 Winter</b>					
	Off-Road	0.5761	2.9031	7.1465	0.014	0.0423	0.0423
	Total	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.014</b>	<b>0.0423</b>	<b>0.0423</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	7.58E-03	0.2846	0.1113	1.17E-03	0.0499	0.0158
	Worker	0.0371	0.0197	0.3695	1.43E-03	0.2169	0.0583

	Total	0.0447	0.3042	0.4808	2.60E-03	0.2668	0.0741
<b>TOTAL</b>		<b>0.62</b>	<b>3.21</b>	<b>7.63</b>	<b>0.02</b>	<b>0.31</b>	<b>0.12</b>
Onsite	<b>2038</b>						
	Off-Road	0.58	2.90	7.15	0.01	0.04	0.04
	Total	<b>0.58</b>	<b>2.90</b>	<b>7.15</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.11	0.00	0.05	0.02
	Worker	0.04	0.02	0.45	0.00	0.22	0.06
	Total	<b>0.05</b>	<b>0.30</b>	<b>0.55</b>	<b>0.00</b>	<b>0.27</b>	<b>0.07</b>
<b>TOTAL</b>		<b>0.62</b>	<b>3.21</b>	<b>7.70</b>	<b>0.02</b>	<b>0.31</b>	<b>0.12</b>

### P3 Paving

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2038 Summer</b>						
	Off-Road	0.6458	3.4702	7.4752	0.0133	0.1067	0.1067
	Paving	0				0	0
	Total	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>	<b>0.1067</b>	<b>0.1067</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0322	0.0161	0.3826	1.35E-03	0.1859	0.0499
	Total	<b>0.0322</b>	<b>0.0161</b>	<b>0.3826</b>	<b>1.35E-03</b>	<b>0.1859</b>	<b>0.0499</b>
<b>TOTAL</b>		<b>0.68</b>	<b>3.49</b>	<b>7.86</b>	<b>0.01</b>	<b>0.29</b>	<b>0.16</b>

Onsite	<b>2038 Winter</b>						
	Off-Road	0.6458	3.4702	7.4752	0.0133	0.1067	0.1067
	Paving	0				0	0
	Total	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>	<b>0.1067</b>	<b>0.1067</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0318	0.0169	0.3167	1.23E-03	0.1859	0.0499
	Total	<b>0.0318</b>	<b>0.0169</b>	<b>0.3167</b>	<b>1.23E-03</b>	<b>0.1859</b>	<b>0.0499</b>
<b>TOTAL</b>		<b>0.68</b>	<b>3.49</b>	<b>7.79</b>	<b>0.01</b>	<b>0.29</b>	<b>0.16</b>

Onsite	<b>2038</b>						
	Off-Road	0.65	3.47	7.48	0.01	0.11	0.11
	Paving	0.00	0.00	0.00	0.00	0.00	0.00
	Total	<b>0.65</b>	<b>3.47</b>	<b>7.48</b>	<b>0.01</b>	<b>0.11</b>	<b>0.11</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.03	0.02	0.38	0.00	0.19	0.05
	Total	<b>0.03</b>	<b>0.02</b>	<b>0.38</b>	<b>0.00</b>	<b>0.19</b>	<b>0.05</b>
<b>TOTAL</b>		<b>0.68</b>	<b>3.49</b>	<b>7.86</b>	<b>0.01</b>	<b>0.29</b>	<b>0.16</b>

### P3 Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2038 Summer</b>						
	Archit. Coating	92.9521				0	0
	Off-Road	0.1179	0.7577	1.7943	2.97E-03	9.90E-03	9.90E-03
	Total	<b>93.07</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.97E-03</b>	<b>9.90E-03</b>	<b>9.90E-03</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0

	Worker	7.16E-03	3.58E-03	0.085	3.00E-04	0.0413	0.0111
	Total	7.16E-03	3.58E-03	0.085	3.00E-04	0.0413	0.0111
<b>TOTAL</b>		<b>93.08</b>	<b>0.76</b>	<b>1.88</b>	<b>0.00</b>	<b>0.05</b>	<b>0.02</b>

Onsite

**2038 Winter**

Archit. Coating	92.9521				0	0
Off-Road	0.1179	0.7577	1.7943	2.97E-03	9.90E-03	9.90E-03
Total	93.07	0.7577	1.7943	2.97E-03	9.90E-03	9.90E-03

Offsite

Hauling	0	0	0	0	0	0
Vendor	0	0	0	0.00E+00	0	0
Worker	7.07E-03	3.74E-03	0.0704	2.70E-04	0.0413	0.0111
Total	7.07E-03	3.74E-03	0.0704	2.70E-04	0.0413	0.0111

**TOTAL**

	<b>93.08</b>	<b>0.76</b>	<b>1.86</b>	<b>0.00</b>	<b>0.05</b>	<b>0.02</b>
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Onsite

**2038**

Archit. Coating	92.95	0.00	0.00	0.00	0.00	0.00
Off-Road	0.12	0.76	1.79	0.00	0.01	0.01
Total	93.07	0.76	1.79	0.00	0.01	0.01

Offsite

Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.00	0.09	0.00	0.04	0.01
Total	0.01	0.00	0.09	0.00	0.04	0.01

**TOTAL**

	<b>93.08</b>	<b>0.76</b>	<b>1.88</b>	<b>0.00</b>	<b>0.05</b>	<b>0.02</b>
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<b>Phase 3 All Activities Overlap</b>		<b>95.55</b>	<b>12.13</b>	<b>26.53</b>	<b>0.07</b>	<b>3.44</b>	<b>1.59</b>
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**P4 Demolition**

		<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
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Onsite

**2042 Summer**

Fugitive Dust					1.2149	0.1839
Off-Road	0.4996	3.0819	7.4089	0.0133	0.0355	0.0355
Total	0.4996	3.0819	7.4089	0.0133	1.2504	0.2194

Offsite

Hauling	0.0299	1.3261	0.4345	5.60E-03	0.2291	0.0726
Vendor	4.13E-03	0.1336	0.054	5.60E-04	0.0249	7.90E-03
Worker	0.0141	7.80E-03	0.1946	7.20E-04	0.1033	0.0277
Total	0.0482	1.4676	0.6831	6.88E-03	0.3573	0.1082

**TOTAL**

	<b>0.55</b>	<b>4.55</b>	<b>8.09</b>	<b>0.02</b>	<b>1.61</b>	<b>0.33</b>
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Onsite

**2042 Winter**

Fugitive Dust					1.2149	0.1839
Off-Road	0.4996	3.0819	7.4089	0.0133	0.0355	0.0355
Total	0.4996	3.0819	7.4089	0.0133	1.2504	0.2194

Offsite

Hauling	0.0275	1.3996	0.4423	5.61E-03	0.2291	0.0726
Vendor	3.79E-03	0.1413	0.0558	5.60E-04	0.025	7.90E-03
Worker	0.0142	8.16E-03	0.1611	6.50E-04	0.1033	0.0277
Total	0.0454	1.5491	0.6592	6.82E-03	0.3573	0.1082

**TOTAL**

	<b>0.55</b>	<b>4.63</b>	<b>8.07</b>	<b>0.02</b>	<b>1.61</b>	<b>0.25</b>
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Onsite

**2042**

Fugitive Dust	0.00	0.00	0.00	0.00	1.21	0.18
Off-Road	0.50	3.08	7.41	0.01	0.04	0.04
Total	0.50	3.08	7.41	0.01	1.25	0.22

Offsite

Hauling	0.03	1.40	0.44	0.01	0.23	0.07
Vendor	0.00	0.14	0.06	0.00	0.03	0.01
Worker	0.01	0.01	0.19	0.00	0.10	0.03
Total	<b>0.05</b>	<b>1.55</b>	<b>0.68</b>	<b>0.01</b>	<b>0.36</b>	<b>0.11</b>
<b>TOTAL</b>	<b>0.55</b>	<b>4.63</b>	<b>8.09</b>	<b>0.02</b>	<b>1.61</b>	<b>0.33</b>

### P4 Site Preparation

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Fugitive Dust					0.2267	0.0245
	Off-Road	0.415	1.4268	3.876	0.0119	0.0277	0.0277
	Total	<b>0.415</b>	<b>1.4268</b>	<b>3.876</b>	<b>0.0119</b>	<b>0.2544</b>	<b>0.0522</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	2.07E-03	0.0668	0.027	2.80E-04	0.0125	3.95E-03
	Worker	7.07E-03	3.90E-03	0.0973	3.60E-04	0.0516	0.0139
	Total	<b>9.14E-03</b>	<b>0.0707</b>	<b>0.1243</b>	<b>6.40E-04</b>	<b>0.0641</b>	<b>0.0178</b>
<b>TOTAL</b>		<b>0.42</b>	<b>1.50</b>	<b>4.00</b>	<b>0.01</b>	<b>0.32</b>	<b>0.07</b>

Onsite	<b>2042 Winter</b>						
	Fugitive Dust					0.2267	0.0245
	Off-Road	0.415	1.4268	3.876	0.0119	0.0277	0.0277
	Total	<b>0.415</b>	<b>1.4268</b>	<b>3.876</b>	<b>0.0119</b>	<b>0.2544</b>	<b>0.0522</b>

Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	1.89E-03	0.0707	0.0279	2.80E-04	0.0125	3.95E-03
	Worker	7.08E-03	4.08E-03	0.0806	3.30E-04	0.0516	0.0139
	Total	<b>8.97E-03</b>	<b>0.0747</b>	<b>0.1084</b>	<b>6.10E-04</b>	<b>0.0641</b>	<b>0.0178</b>
<b>TOTAL</b>		<b>0.42</b>	<b>1.50</b>	<b>3.98</b>	<b>0.01</b>	<b>0.32</b>	<b>0.07</b>

Onsite	<b>2042</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	0.23	0.02
	Off-Road	0.42	1.43	3.88	0.01	0.03	0.03
	Total	<b>0.42</b>	<b>1.43</b>	<b>3.88</b>	<b>0.01</b>	<b>0.25</b>	<b>0.05</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.07	0.03	0.00	0.01	0.00
	Worker	0.01	0.00	0.10	0.00	0.05	0.01
	Total	<b>0.01</b>	<b>0.07</b>	<b>0.12</b>	<b>0.00</b>	<b>0.06</b>	<b>0.02</b>
<b>TOTAL</b>		<b>0.42</b>	<b>1.50</b>	<b>4.00</b>	<b>0.01</b>	<b>0.32</b>	<b>0.07</b>

### P4 Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Fugitive Dust					2.2709	1.0981
	Off-Road	0.662	2.2462	4.801	0.0173	0.0626	0.0626
	Total	<b>0.662</b>	<b>2.2462</b>	<b>4.801</b>	<b>0.0173</b>	<b>2.3334</b>	<b>1.1606</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	4.13E-03	0.1336	0.054	5.60E-04	0.0249	7.90E-03
	Worker	0.0113	6.24E-03	0.1557	5.80E-04	0.0826	0.0222
	Total	<b>0.0154</b>	<b>0.1399</b>	<b>0.2097</b>	<b>1.14E-03</b>	<b>0.1075</b>	<b>0.0301</b>
<b>TOTAL</b>		<b>0.68</b>	<b>2.39</b>	<b>5.01</b>	<b>0.02</b>	<b>2.44</b>	<b>1.19</b>

Onsite	<b>2042 Winter</b>						
	Fugitive Dust					2.2709	1.0981
	Off-Road	0.662	2.2462	4.801	0.0173	0.0626	0.0626
	Total	<b>0.662</b>	<b>2.2462</b>	<b>4.801</b>	<b>0.0173</b>	<b>2.3334</b>	<b>1.1606</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	3.79E-03	0.1413	0.0558	5.60E-04	0.025	7.90E-03
	Worker	0.0113	6.53E-03	0.1289	5.20E-04	0.0826	0.0222
	Total	<b>0.0151</b>	<b>0.1479</b>	<b>0.1846</b>	<b>1.08E-03</b>	<b>0.1076</b>	<b>0.0301</b>
<b>TOTAL</b>		<b>0.68</b>	<b>2.39</b>	<b>4.99</b>	<b>0.02</b>	<b>2.44</b>	<b>1.18</b>

Onsite	<b>2042</b>	Fugitive Dust	0.00	0.00	0.00	0.00	2.27	1.10
		Off-Road	0.66	2.25	4.80	0.02	0.06	0.06
		Total	<b>0.66</b>	<b>2.25</b>	<b>4.80</b>	<b>0.02</b>	<b>2.33</b>	<b>1.16</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.01	0.01	0.16	0.00	0.08	0.02
	Total	<b>0.02</b>	<b>0.15</b>	<b>0.21</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>		<b>0.68</b>	<b>2.39</b>	<b>5.01</b>	<b>0.02</b>	<b>2.44</b>	<b>1.19</b>

### P4 Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>	Off-Road	0.5667	2.7853	7.1504	0.014	0.0355
		Total	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.014</b>	<b>0.0355</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0186	0.6013	0.2431	2.53E-03	0.1123	0.0355
	Worker	0.065	0.0359	0.8952	3.32E-03	0.4749	0.1274
	Total	<b>0.0836</b>	<b>0.6372</b>	<b>1.1382</b>	<b>5.85E-03</b>	<b>0.5872</b>	<b>0.1629</b>
<b>TOTAL</b>		<b>0.65</b>	<b>3.42</b>	<b>8.29</b>	<b>0.02</b>	<b>0.62</b>	<b>0.20</b>

Onsite	<b>2042 Winter</b>	Off-Road	0.5667	2.7853	7.1504	0.014	0.0355
		Total	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.014</b>	<b>0.0355</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.017	0.636	0.2509	2.54E-03	0.1123	0.0355
	Worker	0.0651	0.0375	0.741	3.01E-03	0.4749	0.1274
	Total	<b>0.0822</b>	<b>0.6735</b>	<b>0.9919</b>	<b>5.55E-03</b>	<b>0.5872</b>	<b>0.1629</b>
<b>TOTAL</b>		<b>0.65</b>	<b>3.46</b>	<b>8.14</b>	<b>0.02</b>	<b>0.62</b>	<b>0.20</b>

Onsite	<b>2042</b>	Off-Road	0.57	2.79	7.15	0.01	0.04	0.04
		Total	<b>0.57</b>	<b>2.79</b>	<b>7.15</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.64	0.25	0.00	0.11	0.04
	Worker	0.07	0.04	0.90	0.00	0.47	0.13
	Total	<b>0.08</b>	<b>0.67</b>	<b>1.14</b>	<b>0.01</b>	<b>0.59</b>	<b>0.16</b>
<b>TOTAL</b>		<b>0.65</b>	<b>3.46</b>	<b>8.29</b>	<b>0.02</b>	<b>0.62</b>	<b>0.20</b>

### P4 Paving

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>	Off-Road	0.609	3.1337	7.4736	0.0133	0.0844
		Paving	0			0	0
		Total	<b>0.609</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>	<b>0.0844</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0	0	0	0.00E+00	0	0
Worker	0.0254	0.014	0.3503	1.30E-03	0.1858	0.0499
<b>Total</b>	<b>0.0254</b>	<b>0.014</b>	<b>0.3503</b>	<b>1.30E-03</b>	<b>0.1858</b>	<b>0.0499</b>
<b>TOTAL</b>	<b>0.63</b>	<b>3.15</b>	<b>7.82</b>	<b>0.01</b>	<b>0.27</b>	<b>0.13</b>

Onsite

**2042 Winter**

Off-Road	0.609	3.1337	7.4736	0.0133	0.0844	0.0844
Paving	0				0	0
<b>Total</b>	<b>0.609</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>	<b>0.0844</b>	<b>0.0844</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0	0	0	0.00E+00	0	0
Worker	0.0255	0.0147	0.29	1.18E-03	0.1858	0.0499
<b>Total</b>	<b>0.0255</b>	<b>0.0147</b>	<b>0.29</b>	<b>1.18E-03</b>	<b>0.1858</b>	<b>0.0499</b>

**TOTAL**

**0.63 3.15 7.76 0.01 0.27 0.13**

Onsite

**2042**

Off-Road	0.61	3.13	7.47	0.01	0.08	0.08
Paving	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.61</b>	<b>3.13</b>	<b>7.47</b>	<b>0.01</b>	<b>0.08</b>	<b>0.08</b>

Offsite

Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.03	0.01	0.35	0.00	0.19	0.05
<b>Total</b>	<b>0.03</b>	<b>0.01</b>	<b>0.35</b>	<b>0.00</b>	<b>0.19</b>	<b>0.05</b>

**TOTAL**

**0.63 3.15 7.82 0.01 0.27 0.13**

**P4 Architectural Coating**

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
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Onsite

**2042 Summer**

Archit. Coating	201.6299				0	0
Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
<b>Total</b>	<b>201.7448</b>	<b>0.727</b>	<b>1.7923</b>	<b>2.97E-03</b>	<b>7.43E-03</b>	<b>7.43E-03</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0	0	0	0.00E+00	0	0
Worker	0.0127	7.02E-03	0.1751	6.50E-04	0.0929	0.0249
<b>Total</b>	<b>0.0127</b>	<b>7.02E-03</b>	<b>0.1751</b>	<b>6.50E-04</b>	<b>0.0929</b>	<b>0.0249</b>

**TOTAL**

**201.76 0.73 1.97 0.00 0.10 0.03**

Onsite

**2042 Winter**

Archit. Coating	201.6299				0	0
Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
<b>Total</b>	<b>201.7448</b>	<b>0.727</b>	<b>1.7923</b>	<b>2.97E-03</b>	<b>7.43E-03</b>	<b>7.43E-03</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0	0	0	0.00E+00	0	0
Worker	0.0127	7.34E-03	0.145	5.90E-04	0.0929	0.0249
<b>Total</b>	<b>0.0127</b>	<b>7.34E-03</b>	<b>0.145</b>	<b>5.90E-04</b>	<b>0.0929</b>	<b>0.0249</b>

**TOTAL**

**201.76 0.73 1.94 0.00 0.10 0.03**

Onsite

**2042**

Archit. Coating	201.63	0.00	0.00	0.00	0.00	0.00
Off-Road	0.11	0.73	1.79	0.00	0.01	0.01
<b>Total</b>	<b>201.74</b>	<b>0.73</b>	<b>1.79</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>

Offsite

	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.18	0.00	0.09	0.02
	Total	<b>0.01</b>	<b>0.01</b>	<b>0.18</b>	<b>0.00</b>	<b>0.09</b>	<b>0.02</b>
<b>TOTAL</b>		<b>201.76</b>	<b>0.73</b>	<b>1.97</b>	<b>0.00</b>	<b>0.10</b>	<b>0.03</b>

<b>Phase 4 All Activities Overlap</b>		<b>204.01</b>	<b>13.47</b>	<b>30.17</b>	<b>0.07</b>	<b>2.92</b>	<b>0.76</b>
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**P5 Demolition**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2049 Summer</b>					
	Fugitive Dust					1.6759	0.2538
	Off-Road	1.6982	5.3064	18.5788	0.0462	0.1629	0.1629
	Total	<b>1.6982</b>	<b>5.3064</b>	<b>18.5788</b>	<b>0.0462</b>	<b>1.8388</b>	<b>0.4166</b>
Offsite							
	Hauling	4.12E-02	1.8282	0.5988	7.58E-03	0.3159	1.00E-01
	Vendor	4.14E-03	0.1335	0.054	5.50E-04	0.0249	7.90E-03
	Worker	0.0187	1.11E-02	0.2805	1.06E-03	0.1548	0.0415
	Total	<b>0.0641</b>	<b>1.9728</b>	<b>0.9333</b>	<b>9.19E-03</b>	<b>0.4957</b>	<b>0.1495</b>
<b>TOTAL</b>		<b>1.76</b>	<b>7.28</b>	<b>19.51</b>	<b>0.06</b>	<b>2.33</b>	<b>0.57</b>

Onsite		<b>2049 Winter</b>					
	Fugitive Dust					1.6759	0.2538
	Off-Road	1.6982	5.3064	18.5788	0.0462	0.1629	0.1629
	Total	<b>1.6982</b>	<b>5.3064</b>	<b>18.5788</b>	<b>0.0462</b>	<b>1.8388</b>	<b>0.4166</b>
Offsite							
	Hauling	3.78E-02	1.9297	0.6096	7.59E-03	0.3159	1.00E-01
	Vendor	3.80E-03	0.1412	0.0558	5.50E-04	0.025	7.90E-03
	Worker	0.0189	0.0116	0.2321	9.60E-04	0.1548	0.0415
	Total	<b>0.0605</b>	<b>2.0825</b>	<b>0.8975</b>	<b>9.10E-03</b>	<b>0.4957</b>	<b>0.1496</b>
<b>TOTAL</b>		<b>1.76</b>	<b>7.39</b>	<b>19.48</b>	<b>0.06</b>	<b>2.33</b>	<b>0.46</b>

Onsite		<b>2049</b>					
	Fugitive Dust	0.00	0.00	0.00	0.00	1.68	0.25
	Off-Road	1.70	5.31	18.58	0.05	0.16	0.16
	Total	<b>1.70</b>	<b>5.31</b>	<b>18.58</b>	<b>0.05</b>	<b>1.84</b>	<b>0.42</b>
Offsite							
	Hauling	0.04	1.93	0.61	0.01	0.32	0.10
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.02	0.01	0.28	0.00	0.15	0.04
	Total	<b>0.06</b>	<b>2.08</b>	<b>0.93</b>	<b>0.01</b>	<b>0.50</b>	<b>0.15</b>
<b>TOTAL</b>		<b>1.76</b>	<b>7.39</b>	<b>19.51</b>	<b>0.06</b>	<b>2.33</b>	<b>0.57</b>

**P5 Site Preparation**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2049 Summer</b>					
	Fugitive Dust					8.4034	4.3188
	Off-Road	1.9657	7.9943	15.7797	0.0466	0.2026	0.2026
	Total	<b>1.9657</b>	<b>7.9943</b>	<b>15.7797</b>	<b>0.0466</b>	<b>8.6059</b>	<b>4.5214</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	8.29E-03	0.267	0.1081	1.10E-03	0.0499	1.58E-02
	Worker	2.25E-02	1.33E-02	0.3366	1.27E-03	0.1858	0.0498
	Total	<b>0.0307</b>	<b>0.2803</b>	<b>0.4447</b>	<b>2.37E-03</b>	<b>0.2357</b>	<b>0.0656</b>
<b>TOTAL</b>		<b>2.00</b>	<b>8.27</b>	<b>16.22</b>	<b>0.05</b>	<b>8.84</b>	<b>4.59</b>

Onsite		<b>2049 Winter</b>					
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Offsite	Fugitive Dust					8.4034	4.3188
	Off-Road	1.9657	7.9943	15.7797	0.0466	0.2026	0.2026
	<b>Total</b>	<b>1.9657</b>	<b>7.9943</b>	<b>15.7797</b>	<b>0.0466</b>	<b>8.6059</b>	<b>4.5214</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	7.60E-03	0.2824	0.1116	1.11E-03	0.0499	1.58E-02
	Worker	0.0227	1.40E-02	0.2785	1.15E-03	0.1858	0.0498
	<b>Total</b>	<b>0.0303</b>	<b>0.2964</b>	<b>0.39</b>	<b>2.26E-03</b>	<b>0.2357</b>	<b>0.0656</b>
<b>TOTAL</b>	<b>2.00</b>	<b>8.29</b>	<b>16.17</b>	<b>0.05</b>	<b>8.84</b>	<b>4.57</b>	

Onsite	<b>2049</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	8.40	4.32
	Off-Road	1.97	7.99	15.78	0.05	0.20	0.20
	<b>Total</b>	<b>1.97</b>	<b>7.99</b>	<b>15.78</b>	<b>0.05</b>	<b>8.61</b>	<b>4.52</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.11	0.00	0.05	0.02
	Worker	0.02	0.01	0.34	0.00	0.19	0.05
	<b>Total</b>	<b>0.03</b>	<b>0.30</b>	<b>0.44</b>	<b>0.00</b>	<b>0.24</b>	<b>0.07</b>
<b>TOTAL</b>		<b>2.00</b>	<b>8.29</b>	<b>16.22</b>	<b>0.05</b>	<b>8.84</b>	<b>4.59</b>

**P5 Grading**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2049 Summer</b>						
	Fugitive Dust					3.9345	1.562
	Off-Road	2.7241	7.3885	22.3122	0.0699	0.225	0.225
	<b>Total</b>	<b>2.7241</b>	<b>7.3885</b>	<b>22.3122</b>	<b>0.0699</b>	<b>4.1596</b>	<b>1.787</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	1.66E-02	0.5339	0.2162	2.21E-03	0.0998	0.0316
	Worker	0.0249	1.48E-02	0.374	1.41E-03	0.2064	0.0553
	<b>Total</b>	<b>0.0415</b>	<b>0.5488</b>	<b>0.5902</b>	<b>3.62E-03</b>	<b>0.3062</b>	<b>0.0869</b>
<b>TOTAL</b>		<b>2.77</b>	<b>7.94</b>	<b>22.90</b>	<b>0.07</b>	<b>4.47</b>	<b>1.87</b>

Onsite	<b>2049 Winter</b>						
	Fugitive Dust					3.9345	1.562
	Off-Road	2.7241	7.3885	22.3122	0.0699	0.225	0.225
	<b>Total</b>	<b>2.7241</b>	<b>7.3885</b>	<b>22.3122</b>	<b>0.0699</b>	<b>4.1596</b>	<b>1.787</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	1.52E-02	0.5648	0.2231	2.21E-03	0.0998	0.0316
	Worker	0.0252	1.55E-02	0.3094	1.28E-03	0.2064	0.0553
	<b>Total</b>	<b>0.0404</b>	<b>0.5803</b>	<b>0.5326</b>	<b>3.49E-03</b>	<b>0.3062</b>	<b>0.0869</b>
<b>TOTAL</b>		<b>2.76</b>	<b>7.97</b>	<b>22.84</b>	<b>0.07</b>	<b>4.47</b>	<b>1.84</b>

Onsite	<b>2049</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	3.93	1.56
	Off-Road	2.72	7.39	22.31	0.07	0.23	0.23
	<b>Total</b>	<b>2.72</b>	<b>7.39</b>	<b>22.31</b>	<b>0.07</b>	<b>4.16</b>	<b>1.79</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.56	0.22	0.00	0.10	0.03
	Worker	0.03	0.02	0.37	0.00	0.21	0.06
	<b>Total</b>	<b>0.04</b>	<b>0.58</b>	<b>0.59</b>	<b>0.00</b>	<b>0.31</b>	<b>0.09</b>
<b>TOTAL</b>		<b>2.77</b>	<b>7.97</b>	<b>22.90</b>	<b>0.07</b>	<b>4.47</b>	<b>1.87</b>

**P5 Building Construction**

ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
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Onsite

**2049 Summer**

Off-Road	1.197	6.8903	16.1185	0.031	0.0737	0.0737
Total	<b>1.197</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.031</b>	<b>0.0737</b>	<b>0.0737</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0.0269	0.8677	0.3513	3.59E-03	0.1621	0.0513
Worker	0.0836	0.0497	1.253	4.74E-03	0.6916	0.1854
Total	<b>0.1105</b>	<b>0.9173</b>	<b>1.6042</b>	<b>8.33E-03</b>	<b>0.8537</b>	<b>0.2367</b>

**TOTAL**

**1.31 7.81 17.72 0.04 0.93 0.31**

Onsite

**2049 Winter**

Off-Road	1.197	6.8903	16.1185	0.031	0.0737	0.0737
Total	<b>1.197</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.031</b>	<b>0.0737</b>	<b>0.0737</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0.0247	0.9178	0.3626	3.60E-03	0.1622	0.0513
Worker	0.0845	0.052	1.0366	4.30E-03	0.6916	0.1854
Total	<b>0.1092</b>	<b>0.9697</b>	<b>1.3992</b>	<b>7.90E-03</b>	<b>0.8537</b>	<b>0.2367</b>

**TOTAL**

**1.31 7.86 17.52 0.04 0.93 0.31**

Onsite

**2049**

Off-Road	1.20	6.89	16.12	0.03	0.07	0.07
Total	<b>1.20</b>	<b>6.89</b>	<b>16.12</b>	<b>0.03</b>	<b>0.07</b>	<b>0.07</b>

Offsite

Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.92	0.36	0.00	0.16	0.05
Worker	0.08	0.05	1.25	0.00	0.69	0.19
Total	<b>0.11</b>	<b>0.97</b>	<b>1.60</b>	<b>0.01</b>	<b>0.85</b>	<b>0.24</b>

**TOTAL**

**1.31 7.86 17.72 0.04 0.93 0.31**

**ROG NOx CO SO2 PM10 Total PM2.5 Total**

Onsite

**2050 Summer**

Off-Road	1.197	6.8903	16.1185	0.031	0.0737	0.0737
Total	<b>1.197</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.031</b>	<b>0.0737</b>	<b>0.0737</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0.0269	0.8689	0.348	3.57E-03	0.1621	0.0513
Worker	0.0795	0.0495	1.2397	4.70E-03	0.6915	0.1853
Total	<b>0.1063</b>	<b>0.9184</b>	<b>1.5877</b>	<b>8.27E-03</b>	<b>0.8536</b>	<b>0.2367</b>

**TOTAL**

**1.30 7.81 17.71 0.04 0.93 0.31**

Onsite

**2050 Winter**

Off-Road	1.197	6.8903	16.1185	0.031	0.0737	0.0737
Total	<b>1.197</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.031</b>	<b>0.0737</b>	<b>0.0737</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0.0247	0.9191	0.3591	3.58E-03	0.1621	0.0513
Worker	0.0808	0.0518	1.0249	4.26E-03	0.6915	0.1853
Total	<b>0.1054</b>	<b>0.9709</b>	<b>1.384</b>	<b>7.84E-03</b>	<b>0.8537</b>	<b>0.2367</b>

**TOTAL**

**1.30 7.86 17.50 0.04 0.93 0.31**

Onsite

**2050**

Off-Road	1.20	6.89	16.12	0.03	0.07	0.07
Total	<b>1.20</b>	<b>6.89</b>	<b>16.12</b>	<b>0.03</b>	<b>0.07</b>	<b>0.07</b>

Offsite

Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.92	0.36	0.00	0.16	0.05

	Worker	0.08	0.05	1.24	0.00	0.69	0.19
	Total	<b>0.11</b>	<b>0.97</b>	<b>1.59</b>	<b>0.01</b>	<b>0.85</b>	<b>0.24</b>
<b>TOTAL</b>		<b>1.30</b>	<b>7.86</b>	<b>17.71</b>	<b>0.04</b>	<b>0.93</b>	<b>0.31</b>

**P5 Paving**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2050 Summer</b>					
	Off-Road	1.0112	3.6566	15.8177	0.0281	0.1164	0.1164
	Paving	0				0	0
	Total	<b>1.0112</b>	<b>3.6566</b>	<b>15.8177</b>	<b>0.0281</b>	<b>0.1164</b>	<b>0.1164</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0178	1.11E-02	0.2775	1.05E-03	0.1548	0.0415
	Total	<b>0.0178</b>	<b>1.11E-02</b>	<b>0.2775</b>	<b>1.05E-03</b>	<b>0.1548</b>	<b>0.0415</b>
<b>TOTAL</b>		<b>1.03</b>	<b>3.67</b>	<b>16.10</b>	<b>0.03</b>	<b>0.27</b>	<b>0.16</b>

Onsite		<b>2050 Winter</b>					
	Off-Road	1.0112	3.6566	15.8177	0.0281	0.1164	0.1164
	Paving	0				0	0
	Total	<b>1.0112</b>	<b>3.6566</b>	<b>15.8177</b>	<b>0.0281</b>	<b>0.1164</b>	<b>0.1164</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0181	0.0116	0.2295	9.50E-04	0.1548	0.0415
	Total	<b>0.0181</b>	<b>0.0116</b>	<b>0.2295</b>	<b>9.50E-04</b>	<b>0.1548</b>	<b>0.0415</b>
<b>TOTAL</b>		<b>1.03</b>	<b>3.67</b>	<b>16.05</b>	<b>0.03</b>	<b>0.27</b>	<b>0.16</b>

Onsite		<b>2050</b>					
	Off-Road	1.01	3.66	15.82	0.03	0.12	0.12
	Paving	0.00	0.00	0.00	0.00	0.00	0.00
	Total	<b>1.01</b>	<b>3.66</b>	<b>15.82</b>	<b>0.03</b>	<b>0.12</b>	<b>0.12</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.28	0.00	0.15	0.04
	Total	<b>0.02</b>	<b>0.01</b>	<b>0.28</b>	<b>0.00</b>	<b>0.15</b>	<b>0.04</b>
<b>TOTAL</b>		<b>1.03</b>	<b>3.67</b>	<b>16.10</b>	<b>0.03</b>	<b>0.27</b>	<b>0.16</b>

**P5 Architectural Coating**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2050 Summer</b>					
	Archit. Coating	73.5417				0	0
	Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
	Total	<b>73.6566</b>	<b>0.727</b>	<b>1.7923</b>	<b>2.97E-03</b>	<b>7.43E-03</b>	<b>7.43E-03</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0154	9.60E-03	0.2405	9.10E-04	0.1342	0.036
	Total	<b>0.0154</b>	<b>9.60E-03</b>	<b>0.2405</b>	<b>9.10E-04</b>	<b>0.1342</b>	<b>0.036</b>
<b>TOTAL</b>		<b>73.67</b>	<b>0.74</b>	<b>2.03</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>

Onsite		<b>2050 Winter</b>					
	Archit. Coating	73.5417				0	0
	Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
	Total	<b>73.6566</b>	<b>0.727</b>	<b>1.7923</b>	<b>2.97E-03</b>	<b>7.43E-03</b>	<b>7.43E-03</b>
Offsite							

	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0157	0.01	0.1989	8.30E-04	0.1342	0.036
	Total	0.0157	0.01	0.1989	8.30E-04	0.1342	0.036
<b>TOTAL</b>		<b>73.67</b>	<b>0.74</b>	<b>1.99</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>
Onsite	<b>2050</b>						
	Archit. Coating	73.54	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.11	0.73	1.79	0.00	0.01	0.01
	Total	<b>73.66</b>	<b>0.73</b>	<b>1.79</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.24	0.00	0.13	0.04
	Total	<b>0.02</b>	<b>0.01</b>	<b>0.24</b>	<b>0.00</b>	<b>0.13</b>	<b>0.04</b>
<b>TOTAL</b>		<b>73.67</b>	<b>0.74</b>	<b>2.03</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>
	<b>Phase 5 All Activities Overlap</b>	<b>82.53</b>	<b>35.91</b>	<b>94.49</b>	<b>0.25</b>	<b>16.98</b>	<b>7.54</b>
	<b>Phase 1 Maximum Daily</b>	<b>71.98</b>	<b>28.57</b>	<b>27.17</b>	<b>0.07</b>	<b>9.73</b>	<b>5.38</b>
	<b>Phase 2 Maximum Daily</b>	<b>122.14</b>	<b>10.19</b>	<b>13.95</b>	<b>0.04</b>	<b>3.35</b>	<b>1.69</b>
	<b>Phase 3 Maximum Daily</b>	<b>93.08</b>	<b>3.49</b>	<b>7.86</b>	<b>0.02</b>	<b>2.47</b>	<b>1.22</b>
	<b>Phase 4 Maximum Daily</b>	<b>201.76</b>	<b>4.63</b>	<b>8.29</b>	<b>0.02</b>	<b>2.44</b>	<b>1.19</b>
	<b>Phase 5 Maximum Daily</b>	<b>73.67</b>	<b>8.29</b>	<b>22.90</b>	<b>0.07</b>	<b>8.84</b>	<b>4.59</b>
	<b>Individual Development Phase Worst-Case Scenario Max Daily</b>	<b>201.76</b>	<b>28.57</b>	<b>27.17</b>	<b>0.07</b>	<b>9.73</b>	<b>5.38</b>
	<b>Regional Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
	Exceeds Thresholds?	Yes	No	No	No	No	No
	<b>Phase 1 - All Activities Overlap Maximum Daily</b>	<b>84.72</b>	<b>102.21</b>	<b>111.30</b>	<b>0.26</b>	<b>23.25</b>	<b>11.39</b>
	<b>Phase 2 - All Activities Overlap Maximum Daily</b>	<b>127.84</b>	<b>34.55</b>	<b>54.01</b>	<b>0.14</b>	<b>9.96</b>	<b>4.36</b>
	<b>Phase 3 - All Activities Overlap Maximum Daily</b>	<b>95.55</b>	<b>12.13</b>	<b>26.53</b>	<b>0.07</b>	<b>3.44</b>	<b>1.59</b>
	<b>Phase 4 - All Activities Overlap Maximum Daily</b>	<b>204.01</b>	<b>13.47</b>	<b>30.17</b>	<b>0.07</b>	<b>2.92</b>	<b>0.76</b>
	<b>Phase 5 - All Activities Overlap Maximum Daily</b>	<b>82.53</b>	<b>35.91</b>	<b>94.49</b>	<b>0.25</b>	<b>16.98</b>	<b>7.54</b>
	<b>Activities Overlap Worst-Case Scenario Max Daily</b>	<b>204.01</b>	<b>102.21</b>	<b>111.30</b>	<b>0.26</b>	<b>23.25</b>	<b>11.39</b>
	<b>Regional Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
	Exceeds Thresholds?	Yes	Yes	No	No	No	No

# Regional Construction Emissions Worksheet - Mitigated

\*CalEEMod, Version 2020.4.0

P1 Demolition			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
			<b>2026 Summer</b>					
Onsite	Fugitive Dust						1.0109	0.1531
	Off-Road		2.0926	19.1966	19.4184	0.0388	0.8528	0.792
	Total		<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>	<b>1.8636</b>	<b>0.945</b>
Offsite	Hauling		2.61E-02	1.1997	0.3715	5.86E-03	0.1937	6.20E-02
	Vendor		4.41E-03	0.1397	0.0562	6.80E-04	0.025	7.96E-03
	Worker		0.0474	0.0253	0.4575	1.36E-03	0.1553	0.0419
	Total		<b>0.0779</b>	<b>1.3646</b>	<b>0.8852</b>	<b>7.90E-03</b>	<b>0.3739</b>	<b>0.1119</b>
<b>TOTAL</b>			<b>2.17</b>	<b>20.56</b>	<b>20.30</b>	<b>0.05</b>	<b>2.24</b>	<b>1.06</b>
			<b>2026 Winter</b>					
Onsite	Fugitive Dust						1.0109	0.1531
	Off-Road		2.0926	19.1966	19.4184	0.0388	0.8528	0.792
	Total		<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>	<b>1.8636</b>	<b>0.945</b>
Offsite	Hauling		2.41E-02	1.2648	0.3781	5.87E-03	0.1937	6.20E-02
	Vendor		4.08E-03	0.1475	0.058	6.80E-04	0.025	7.97E-03
	Worker		0.046	0.0266	0.3778	1.23E-03	0.1553	0.0419
	Total		<b>0.0742</b>	<b>1.4389</b>	<b>0.8139</b>	<b>7.78E-03</b>	<b>0.374</b>	<b>0.1119</b>
<b>TOTAL</b>			<b>2.17</b>	<b>20.64</b>	<b>20.23</b>	<b>0.05</b>	<b>2.24</b>	<b>0.99</b>
			<b>2026</b>					
Onsite	Fugitive Dust		0.00	0.00	0.00	0.00	1.01	0.15
	Off-Road		2.09	19.20	19.42	0.04	0.85	0.79
	Total		<b>2.09</b>	<b>19.20</b>	<b>19.42</b>	<b>0.04</b>	<b>1.86</b>	<b>0.95</b>
Offsite	Hauling		0.03	1.26	0.38	0.01	0.19	0.06
	Vendor		0.00	0.15	0.06	0.00	0.03	0.01
	Worker		0.05	0.03	0.46	0.00	0.16	0.04
	Total		<b>0.08</b>	<b>1.44</b>	<b>0.89</b>	<b>0.01</b>	<b>0.37</b>	<b>0.11</b>
<b>TOTAL</b>			<b>2.17</b>	<b>20.64</b>	<b>20.30</b>	<b>0.05</b>	<b>2.24</b>	<b>1.06</b>

Site Preparation			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
			<b>2026 Summer</b>					
Onsite	Fugitive Dust						7.2829	3.743
	Off-Road		0.6967	12.162	22.96	0.0381	0.0621	0.0621
	Total		<b>0.6967</b>	<b>12.162</b>	<b>22.96</b>	<b>0.0381</b>	<b>7.345</b>	<b>3.805</b>
Offsite	Hauling		0	0	0	0	0	0
	Vendor		8.82E-03	0.2793	0.1125	1.36E-03	0.05	0.0159
	Worker		0.0569	0.0304	0.549	1.63E-03	0.1863	0.0503
	Total		<b>0.0658</b>	<b>0.3097</b>	<b>0.6614</b>	<b>2.99E-03</b>	<b>0.2364</b>	<b>0.0662</b>
<b>TOTAL</b>			<b>0.76</b>	<b>12.47</b>	<b>23.62</b>	<b>0.04</b>	<b>7.58</b>	<b>3.87</b>

		2026 Winter					
Onsite	Fugitive Dust					7.2829	3.743
	Off-Road	0.6967	12.162	22.96	0.0381	0.0621	0.0621
	<b>Total</b>	<b>0.6967</b>	<b>12.162</b>	<b>22.96</b>	<b>0.0381</b>	<b>7.345</b>	<b>3.805</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	8.16E-03	0.2951	0.116	1.36E-03	0.05	0.0159
	Worker	0.0552	0.0319	0.4534	1.48E-03	0.1863	0.0503
	<b>Total</b>	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.84E-03</b>	<b>0.2364</b>	<b>0.0662</b>
<b>TOTAL</b>	<b>0.76</b>	<b>12.49</b>	<b>23.53</b>	<b>0.04</b>	<b>7.58</b>	<b>3.86</b>	

		2026					
Onsite	Fugitive Dust	0.00	0.00	0.00	0.00	7.28	3.74
	Off-Road	0.70	12.16	22.96	0.04	0.06	0.06
	<b>Total</b>	<b>0.70</b>	<b>12.16</b>	<b>22.96</b>	<b>0.04</b>	<b>7.35</b>	<b>3.81</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.30	0.12	0.00	0.05	0.02
	Worker	0.06	0.03	0.55	0.00	0.19	0.05
	<b>Total</b>	<b>0.07</b>	<b>0.33</b>	<b>0.66</b>	<b>0.00</b>	<b>0.24</b>	<b>0.07</b>
<b>TOTAL</b>	<b>0.76</b>	<b>12.49</b>	<b>23.62</b>	<b>0.04</b>	<b>7.58</b>	<b>3.87</b>	

**P1 Grading**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		2026 Summer					
Onsite	Fugitive Dust					3.4099	1.3537
	Off-Road	1.011	19.2707	36.7226	0.0621	0.1015	0.1015
	<b>Total</b>	<b>1.011</b>	<b>19.2707</b>	<b>36.7226</b>	<b>0.0621</b>	<b>3.5115</b>	<b>1.4553</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0176	0.5587	0.2249	2.71E-03	0.1001	0.0319
	Worker	0.0633	0.0337	0.61	1.81E-03	0.207	0.0559
	<b>Total</b>	<b>0.0809</b>	<b>0.5924</b>	<b>0.8349</b>	<b>4.52E-03</b>	<b>0.3071</b>	<b>0.0877</b>
<b>TOTAL</b>	<b>1.09</b>	<b>19.86</b>	<b>37.56</b>	<b>0.07</b>	<b>3.82</b>	<b>1.54</b>	

		2026 Winter					
Onsite	Fugitive Dust					3.4099	1.3537
	Off-Road	1.011	19.2707	36.7226	0.0621	0.1015	0.1015
	<b>Total</b>	<b>1.011</b>	<b>19.2707</b>	<b>36.7226</b>	<b>0.0621</b>	<b>3.5115</b>	<b>1.4553</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0163	0.5901	0.232	2.72E-03	0.1001	0.0319
	Worker	0.0614	0.0354	0.5037	1.64E-03	0.207	0.0559
	<b>Total</b>	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.36E-03</b>	<b>0.3071</b>	<b>0.0877</b>
<b>TOTAL</b>	<b>1.09</b>	<b>19.90</b>	<b>37.46</b>	<b>0.07</b>	<b>3.82</b>	<b>1.51</b>	

		2026					
Onsite	Fugitive Dust	0.00	0.00	0.00	0.00	3.41	1.35
	Off-Road	1.01	19.27	36.72	0.06	0.10	0.10
	<b>Total</b>	<b>1.01</b>	<b>19.27</b>	<b>36.72</b>	<b>0.06</b>	<b>3.51</b>	<b>1.46</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.59	0.23	0.00	0.10	0.03
	Worker	0.06	0.04	0.61	0.00	0.21	0.06
	<b>Total</b>	<b>0.08</b>	<b>0.63</b>	<b>0.83</b>	<b>0.00</b>	<b>0.31</b>	<b>0.09</b>
<b>TOTAL</b>	<b>1.09</b>	<b>19.90</b>	<b>37.56</b>	<b>0.07</b>	<b>3.82</b>	<b>1.54</b>	

**P1 Building Construction**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2026 Summer</b>						
	Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963
	Total	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.027</b>	<b>0.5276</b>	<b>0.4963</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.1256	3.9804	1.6025	1.93E-02	0.7129	0.2269
	Worker	0.9267	0.494	8.936	0.0266	3.0328	0.8186
	Total	<b>1.0523</b>	<b>4.4744</b>	<b>10.5386</b>	<b>0.0459</b>	<b>3.7458</b>	<b>1.0455</b>
<b>TOTAL</b>		<b>2.42</b>	<b>16.94</b>	<b>26.62</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

Onsite	<b>2026 Winter</b>						
	Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963
	Total	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.027</b>	<b>0.5276</b>	<b>0.4963</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.1163	4.2045	1.6529	1.94E-02	0.713	0.227
	Worker	0.8992	0.5189	7.3797	0.0241	3.0328	0.8186
	Total	<b>1.0154</b>	<b>4.7233</b>	<b>9.0326</b>	<b>0.0435</b>	<b>3.7459</b>	<b>1.0456</b>
<b>TOTAL</b>		<b>2.38</b>	<b>17.19</b>	<b>25.12</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

Onsite	<b>2026</b>						
	Off-Road	1.37	12.47	16.08	0.03	0.53	0.50
	Total	<b>1.37</b>	<b>12.47</b>	<b>16.08</b>	<b>0.03</b>	<b>0.53</b>	<b>0.50</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.13	4.20	1.65	0.02	0.71	0.23
	Worker	0.93	0.52	8.94	0.03	3.03	0.82
	Total	<b>1.05</b>	<b>4.72</b>	<b>10.54</b>	<b>0.05</b>	<b>3.75</b>	<b>1.05</b>
<b>TOTAL</b>		<b>2.42</b>	<b>17.19</b>	<b>26.62</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2027 Summer</b>						
	Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963
	Total	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.027</b>	<b>0.5276</b>	<b>0.4963</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.1237	3.9505	1.584	1.89E-02	0.7127	0.2267
	Worker	0.8682	0.4485	8.4114	0.0258	3.032	0.8178
	Total	<b>0.9919</b>	<b>4.399</b>	<b>9.9954</b>	<b>0.0447</b>	<b>3.7447</b>	<b>1.0445</b>
<b>TOTAL</b>		<b>2.36</b>	<b>16.87</b>	<b>26.08</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

Onsite	<b>2027 Winter</b>						
	Off-Road	1.3674	12.4697	16.0847	0.027	0.5276	0.4963
	Total	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.027</b>	<b>0.5276</b>	<b>0.4963</b>
Offsite	Hauling	0	0	0	0	0	0

	Vendor	0.1143	4.1732	1.634	1.90E-02	0.7128	0.2268
	Worker	0.8442	0.4709	6.9518	2.34E-02	3.032	0.8178
	Total	<b>0.9585</b>	<b>4.6441</b>	<b>8.5858</b>	<b>0.0424</b>	<b>3.7448</b>	<b>1.0446</b>
<b>TOTAL</b>		<b>2.33</b>	<b>17.11</b>	<b>24.67</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>
Onsite	<b>2027</b>						
	Off-Road	1.37	12.47	16.08	0.03	0.53	0.50
	Total	<b>1.37</b>	<b>12.47</b>	<b>16.08</b>	<b>0.03</b>	<b>0.53</b>	<b>0.50</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.12	4.17	1.63	0.02	0.71	0.23
	Worker	0.87	0.47	8.41	0.03	3.03	0.82
	Total	<b>0.99</b>	<b>4.64</b>	<b>10.00</b>	<b>0.04</b>	<b>3.74</b>	<b>1.04</b>
<b>TOTAL</b>		<b>2.36</b>	<b>17.11</b>	<b>26.08</b>	<b>0.07</b>	<b>4.27</b>	<b>1.54</b>

### P1 Paving

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2027 Summer</b>						
	Off-Road	0.9152	8.5816	14.578	0.0228	0.4185	0.385
	Paving	1.6611				0	0
	Total	<b>2.5762</b>	<b>8.5816</b>	<b>14.578</b>	<b>0.0228</b>	<b>0.4185</b>	<b>0.385</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0445	0.023	0.4306	1.32E-03	0.1552	0.0419
	Total	<b>0.0445</b>	<b>0.023</b>	<b>0.4306</b>	<b>1.32E-03</b>	<b>0.1552</b>	<b>0.0419</b>
<b>TOTAL</b>		<b>2.62</b>	<b>8.60</b>	<b>15.01</b>	<b>0.02</b>	<b>0.57</b>	<b>0.43</b>

Onsite	<b>2027 Winter</b>						
	Off-Road	0.9152	8.5816	14.578	0.0228	0.4185	0.385
	Paving	1.6611				0	0
	Total	<b>2.5762</b>	<b>8.5816</b>	<b>14.578</b>	<b>0.0228</b>	<b>0.4185</b>	<b>0.385</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0432	0.0241	0.3559	1.20E-03	0.1552	0.0419
	Total	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.20E-03</b>	<b>0.1552</b>	<b>0.0419</b>
<b>TOTAL</b>		<b>2.62</b>	<b>8.61</b>	<b>14.93</b>	<b>0.02</b>	<b>0.57</b>	<b>0.43</b>

Onsite	<b>2027</b>						
	Off-Road	0.92	8.58	14.58	0.02	0.42	0.39
	Paving	1.66	0.00	0.00	0.00	0.00	0.00
	Total	<b>2.58</b>	<b>8.58</b>	<b>14.58</b>	<b>0.02</b>	<b>0.42</b>	<b>0.39</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.43	0.00	0.16	0.04
	Total	<b>0.04</b>	<b>0.02</b>	<b>0.43</b>	<b>0.00</b>	<b>0.16</b>	<b>0.04</b>
<b>TOTAL</b>		<b>2.62</b>	<b>8.61</b>	<b>15.01</b>	<b>0.02</b>	<b>0.57</b>	<b>0.43</b>

### P1 Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2027 Summer</b>						
	Archit. Coating	26.2983				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	Total	<b>26.4691</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.97E-03</b>	<b>0.0515</b>	<b>0.0515</b>



Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1748	0.0903	1.6938	5.19E-03	0.6105	0.1647
<b>TOTAL</b>	<b>Total</b>	<b>0.1748</b>	<b>0.0903</b>	<b>1.6938</b>	<b>5.19E-03</b>	<b>0.6105</b>	<b>0.1647</b>

Onsite	<b>2027 Winter</b>						
	Archit. Coating	26.2983				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	<b>Total</b>	<b>26.4691</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.97E-03</b>	<b>0.0515</b>	<b>0.0515</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.17	0.0948	1.3999	4.71E-03	0.6105	0.1647
<b>TOTAL</b>	<b>Total</b>	<b>0.17</b>	<b>0.0948</b>	<b>1.3999</b>	<b>4.71E-03</b>	<b>0.6105</b>	<b>0.1647</b>

Onsite	<b>2027</b>						
	Archit. Coating	26.30	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.17	1.15	1.81	0.00	0.05	0.05
	<b>Total</b>	<b>26.47</b>	<b>1.15</b>	<b>1.81</b>	<b>0.00</b>	<b>0.05</b>	<b>0.05</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.17	0.09	1.69	0.01	0.61	0.16
<b>TOTAL</b>	<b>Total</b>	<b>0.17</b>	<b>0.09</b>	<b>1.69</b>	<b>0.01</b>	<b>0.61</b>	<b>0.16</b>

<b>Phase 1 All Activities Overlap</b>		<b>35.71</b>	<b>80.06</b>	<b>126.62</b>	<b>0.26</b>	<b>19.15</b>	<b>8.66</b>
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**P2 Demolition**

		<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Onsite	<b>2030 Summer</b>						
	Fugitive Dust					1.6974	0.257
	Off-Road	1.3307	8.0078	12.9685	0.0281	0.2148	0.2148
	<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>1.9122</b>	<b>0.4718</b>

Offsite	Hauling	0.0421	1.9157	0.6083	8.86E-03	0.3203	0.1021
	Vendor	4.20E-03	0.1364	0.0543	6.30E-04	0.025	7.94E-03
	Worker	0.0317	0.0155	0.3226	1.06E-03	0.1344	0.0362
<b>TOTAL</b>	<b>Total</b>	<b>0.078</b>	<b>2.0677</b>	<b>0.9851</b>	<b>1.06E-02</b>	<b>0.4797</b>	<b>0.1463</b>

Onsite	<b>2030 Winter</b>						
	Fugitive Dust					1.6974	0.257
	Off-Road	1.3307	8.0078	12.9685	0.0281	0.2148	0.2148
	<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>1.9122</b>	<b>0.4718</b>

Offsite	Hauling	0.0388	2.0205	0.6191	8.87E-03	0.3203	0.1022
	Vendor	3.87E-03	0.1442	0.056	6.30E-04	0.025	7.94E-03
	Worker	0.031	0.0163	0.267	9.60E-04	0.1344	0.0362
<b>TOTAL</b>	<b>Total</b>	<b>0.0737</b>	<b>2.1809</b>	<b>0.942</b>	<b>1.05E-02</b>	<b>0.4797</b>	<b>0.1463</b>

		<b>2030</b>					
Onsite	Fugitive Dust	0.00	0.00	0.00	0.00	1.70	0.26
	Off-Road	1.33	8.01	12.97	0.03	0.21	0.21
	<b>Total</b>	<b>1.33</b>	<b>8.01</b>	<b>12.97</b>	<b>0.03</b>	<b>1.91</b>	<b>0.47</b>
Offsite	Hauling	0.04	2.02	0.62	0.01	0.32	0.10
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.03	0.02	0.32	0.00	0.13	0.04
	<b>Total</b>	<b>0.08</b>	<b>2.18</b>	<b>0.99</b>	<b>0.01</b>	<b>0.48</b>	<b>0.15</b>
<b>TOTAL</b>		<b>1.41</b>	<b>10.19</b>	<b>13.95</b>	<b>0.04</b>	<b>2.39</b>	<b>0.62</b>

**P2 Site Preparation**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		<b>2030 Summer</b>					
Onsite	Fugitive Dust					2.3216	1.113
	Off-Road	0.2998	5.0659	9.8221	0.0211	0.0281	0.0281
	<b>Total</b>	<b>0.2998</b>	<b>5.0659</b>	<b>9.8221</b>	<b>0.0211</b>	<b>2.3497</b>	<b>1.1411</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	4.20E-03	0.1364	0.0543	6.30E-04	0.025	7.94E-03
	Worker	0.0195	9.54E-03	0.1985	6.50E-04	0.0827	0.0223
	<b>Total</b>	<b>0.0237</b>	<b>0.146</b>	<b>0.2528</b>	<b>1.28E-03</b>	<b>0.1077</b>	<b>0.0302</b>
<b>TOTAL</b>		<b>0.32</b>	<b>5.21</b>	<b>10.07</b>	<b>0.02</b>	<b>2.46</b>	<b>1.17</b>

		<b>2030 Winter</b>					
Onsite	Fugitive Dust					2.3216	1.113
	Off-Road	0.2998	5.0659	9.8221	0.0211	0.0281	0.0281
	<b>Total</b>	<b>0.2998</b>	<b>5.0659</b>	<b>9.8221</b>	<b>0.0211</b>	<b>2.3497</b>	<b>1.1411</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	3.87E-03	0.1442	0.056	6.30E-04	0.025	7.94E-03
	Worker	0.0191	0.01	0.1643	5.90E-04	0.0827	0.0223
	<b>Total</b>	<b>0.0229</b>	<b>0.1542</b>	<b>0.2203</b>	<b>1.22E-03</b>	<b>0.1077</b>	<b>0.0302</b>
<b>TOTAL</b>		<b>0.32</b>	<b>5.22</b>	<b>10.04</b>	<b>0.02</b>	<b>2.46</b>	<b>1.16</b>

		<b>2030</b>					
Onsite	Fugitive Dust	0.00	0.00	0.00	0.00	2.32	1.11
	Off-Road	0.30	5.07	9.82	0.02	0.03	0.03
	<b>Total</b>	<b>0.30</b>	<b>5.07</b>	<b>9.82</b>	<b>0.02</b>	<b>2.35</b>	<b>1.14</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.02	0.01	0.20	0.00	0.08	0.02
	<b>Total</b>	<b>0.02</b>	<b>0.15</b>	<b>0.25</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>		<b>0.32</b>	<b>5.22</b>	<b>10.07</b>	<b>0.02</b>	<b>2.46</b>	<b>1.17</b>

**P2 Grading**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2030 Summer</b>						
	Fugitive Dust					2.6241	1.2689
	Off-Road	0.3694	6.3628	12.145	0.0252	0.0336	0.0336
	<b>Total</b>	<b>0.3694</b>	<b>6.3628</b>	<b>12.145</b>	<b>0.0252</b>	<b>2.6577</b>	<b>1.3025</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	6.30E-03	0.2046	0.0814	9.40E-04	0.0375	0.0119
	Worker	0.0244	0.0119	0.2481	8.20E-04	0.1034	0.0278
	<b>Total</b>	<b>0.0307</b>	<b>0.2166</b>	<b>0.3295</b>	<b>1.76E-03</b>	<b>0.1409</b>	<b>0.0397</b>
<b>TOTAL</b>	<b>0.40</b>	<b>6.58</b>	<b>12.47</b>	<b>0.03</b>	<b>2.80</b>	<b>1.34</b>	

Onsite	<b>2030 Winter</b>						
	Fugitive Dust					2.6241	1.2689
	Off-Road	0.3694	6.3628	12.145	0.0252	0.0336	0.0336
	<b>Total</b>	<b>0.3694</b>	<b>6.3628</b>	<b>12.145</b>	<b>0.0252</b>	<b>2.6577</b>	<b>1.3025</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	5.80E-03	0.2162	0.084	9.40E-04	0.0375	0.0119
	Worker	0.0238	0.0125	0.2054	7.40E-04	0.1034	0.0278
	<b>Total</b>	<b>0.0296</b>	<b>0.2287</b>	<b>0.2894</b>	<b>1.68E-03</b>	<b>0.1409</b>	<b>0.0397</b>
<b>TOTAL</b>	<b>0.40</b>	<b>6.59</b>	<b>12.43</b>	<b>0.03</b>	<b>2.80</b>	<b>1.33</b>	

Onsite	<b>2030</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	2.62	1.27
	Off-Road	0.37	6.36	12.15	0.03	0.03	0.03
	<b>Total</b>	<b>0.37</b>	<b>6.36</b>	<b>12.15</b>	<b>0.03</b>	<b>2.66</b>	<b>1.30</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.22	0.08	0.00	0.04	0.01
	Worker	0.02	0.01	0.25	0.00	0.10	0.03
	<b>Total</b>	<b>0.03</b>	<b>0.23</b>	<b>0.33</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>
<b>TOTAL</b>	<b>0.40</b>	<b>6.59</b>	<b>12.47</b>	<b>0.03</b>	<b>2.80</b>	<b>1.34</b>	

**P2 Building Construction**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2030 Summer</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0231	0.7503	0.2985	3.44E-03	0.1375	0.0437
	Worker	0.1341	0.0656	1.3647	4.49E-03	0.5687	0.1531
	<b>Total</b>	<b>0.1572</b>	<b>0.8159</b>	<b>1.6632</b>	<b>7.93E-03</b>	<b>0.7061</b>	<b>0.1968</b>
<b>TOTAL</b>	<b>1.24</b>	<b>8.00</b>	<b>13.77</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>	

Onsite	<b>2030 Winter</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	Total	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0213	0.7928	0.308	3.45E-03	0.1375	0.0437
	Worker	0.1311	0.0688	1.1295	4.07E-03	0.5687	0.1531
	Total	<b>0.1523</b>	<b>0.8616</b>	<b>1.4374</b>	<b>7.52E-03</b>	<b>0.7062</b>	<b>0.1968</b>
	<b>TOTAL</b>	<b>1.23</b>	<b>8.05</b>	<b>13.55</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

Onsite	<b>2030</b>						
	Off-Road	1.08	7.19	12.11	0.02	0.13	0.13
	Total	<b>1.08</b>	<b>7.19</b>	<b>12.11</b>	<b>0.02</b>	<b>0.13</b>	<b>0.13</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.79	0.31	0.00	0.14	0.04
	Worker	0.13	0.07	1.36	0.00	0.57	0.15
	Total	<b>0.16</b>	<b>0.86</b>	<b>1.66</b>	<b>0.01</b>	<b>0.71</b>	<b>0.20</b>
	<b>TOTAL</b>	<b>1.24</b>	<b>8.05</b>	<b>13.77</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2031 Summer</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	Total	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.023	0.7497	0.2977	3.39E-03	0.1373	0.0436
	Worker	0.1253	0.061	1.3195	4.41E-03	0.5686	0.153
	Total	<b>0.1483</b>	<b>0.8107</b>	<b>1.6172</b>	<b>7.80E-03</b>	<b>0.7059</b>	<b>0.1965</b>
	<b>TOTAL</b>	<b>1.23</b>	<b>8.00</b>	<b>13.73</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

Onsite	<b>2031 Winter</b>						
	Off-Road	1.0812	7.1882	12.1101	0.0238	0.127	0.127
	Total	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>	<b>0.127</b>	<b>0.127</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0211	0.7922	0.3071	3.40E-03	0.1373	0.0436
	Worker	0.1227	0.0639	1.0919	3.99E-03	0.5686	0.153
	Total	<b>0.1438</b>	<b>0.8561</b>	<b>1.399</b>	<b>7.39E-03</b>	<b>0.7059</b>	<b>0.1965</b>
	<b>TOTAL</b>	<b>1.23</b>	<b>8.04</b>	<b>13.51</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

Onsite	<b>2031</b>						
	Off-Road	1.08	7.19	12.11	0.02	0.13	0.13
	Total	<b>1.08</b>	<b>7.19</b>	<b>12.11</b>	<b>0.02</b>	<b>0.13</b>	<b>0.13</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.79	0.31	0.00	0.14	0.04
	Worker	0.13	0.06	1.32	0.00	0.57	0.15
	Total	<b>0.15</b>	<b>0.86</b>	<b>1.62</b>	<b>0.01</b>	<b>0.71</b>	<b>0.20</b>
	<b>TOTAL</b>	<b>1.23</b>	<b>8.04</b>	<b>13.73</b>	<b>0.03</b>	<b>0.83</b>	<b>0.32</b>

**P2 Paving**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		<b>2031 Summer</b>					
Onsite	Off-Road	0.8162	4.3905	9.4567	0.0165	0.1728	0.1728
	Paving	0				0	0
	<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>	<b>0.1728</b>	<b>0.1728</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0296	0.0144	0.3119	1.04E-03	0.1344	0.0362
	<b>Total</b>	<b>0.0296</b>	<b>0.0144</b>	<b>0.3119</b>	<b>1.04E-03</b>	<b>0.1344</b>	<b>0.0362</b>
<b>TOTAL</b>	<b>0.85</b>	<b>4.40</b>	<b>9.77</b>	<b>0.02</b>	<b>0.31</b>	<b>0.21</b>	
		<b>2031 Winter</b>					
Onsite	Off-Road	0.8162	4.3905	9.4567	0.0165	0.1728	0.1728
	Paving	0				0	0
	<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>	<b>0.1728</b>	<b>0.1728</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.029	0.0151	0.2581	9.40E-04	0.1344	0.0362
	<b>Total</b>	<b>0.029</b>	<b>0.0151</b>	<b>0.2581</b>	<b>9.40E-04</b>	<b>0.1344</b>	<b>0.0362</b>
<b>TOTAL</b>	<b>0.85</b>	<b>4.41</b>	<b>9.71</b>	<b>0.02</b>	<b>0.31</b>	<b>0.21</b>	
		<b>2031</b>					
Onsite	Off-Road	0.82	4.39	9.46	0.02	0.17	0.17
	Paving	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Total</b>	<b>0.82</b>	<b>4.39</b>	<b>9.46</b>	<b>0.02</b>	<b>0.17</b>	<b>0.17</b>
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.03	0.02	0.31	0.00	0.13	0.04
	<b>Total</b>	<b>0.03</b>	<b>0.02</b>	<b>0.31</b>	<b>0.00</b>	<b>0.13</b>	<b>0.04</b>
<b>TOTAL</b>	<b>0.85</b>	<b>4.41</b>	<b>9.77</b>	<b>0.02</b>	<b>0.31</b>	<b>0.21</b>	

**P2 Architectural Coating**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		<b>2031 Summer</b>					
Onsite	Archit. Coating	24.3964				0	0
	Off-Road	0.1308	0.8563	1.7977	2.97E-03	0.0203	0.0203
	<b>Total</b>	<b>24.5271</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.97E-03</b>	<b>0.0203</b>	<b>0.0203</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0251	0.0122	0.2639	8.80E-04	0.1137	0.0306
	<b>Total</b>	<b>0.0251</b>	<b>0.0122</b>	<b>0.2639</b>	<b>8.80E-04</b>	<b>0.1137</b>	<b>0.0306</b>
<b>TOTAL</b>	<b>24.55</b>	<b>0.87</b>	<b>2.06</b>	<b>0.00</b>	<b>0.13</b>	<b>0.05</b>	
		<b>2031 Winter</b>					
Onsite	Archit. Coating	24.3964				0	0
	Off-Road	0.1308	0.8563	1.7977	2.97E-03	0.0203	0.0203
	<b>Total</b>	<b>24.5271</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.97E-03</b>	<b>0.0203</b>	<b>0.0203</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0

	Worker	0.0245	0.0128	0.2184	8.00E-04	0.1137	0.0306
	Total	<b>0.0245</b>	<b>0.0128</b>	<b>0.2184</b>	<b>8.00E-04</b>	<b>0.1137</b>	<b>0.0306</b>
<b>TOTAL</b>		<b>24.55</b>	<b>0.87</b>	<b>2.02</b>	<b>0.00</b>	<b>0.13</b>	<b>0.05</b>
Onsite	<b>2031</b>						
	Archit. Coating	24.40	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.13	0.86	1.80	0.00	0.02	0.02
	Total	<b>24.53</b>	<b>0.86</b>	<b>1.80</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.03	0.01	0.26	0.00	0.11	0.03
	Total	<b>0.03</b>	<b>0.01</b>	<b>0.26</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>		<b>24.55</b>	<b>0.87</b>	<b>2.06</b>	<b>0.00</b>	<b>0.13</b>	<b>0.05</b>
<b>Phase 2 All Activities Overlap</b>		<b>28.77</b>	<b>35.32</b>	<b>62.11</b>	<b>0.14</b>	<b>8.92</b>	<b>3.72</b>

### P3 Site Preparation

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2038 Summer</b>						
	Fugitive Dust					2.27E-01	2.45E-02
	Off-Road	4.28E-01	1.57E+00	3.88E+00	1.19E-02	3.43E-02	3.43E-02
	Total	<b>4.28E-01</b>	<b>1.57E+00</b>	<b>3.88E+00</b>	<b>1.19E-02</b>	<b>2.61E-01</b>	<b>5.88E-02</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	2.07E-03	6.73E-02	2.70E-02	2.90E-04	1.25E-02	3.95E-03
	Worker	8.95E-03	4.47E-03	1.06E-01	3.80E-04	5.17E-02	1.39E-02
	Total	<b>0.011</b>	<b>7.18E-02</b>	<b>1.33E-01</b>	<b>6.70E-04</b>	<b>6.41E-02</b>	<b>1.78E-02</b>
<b>TOTAL</b>		<b>0.44</b>	<b>1.65</b>	<b>4.01</b>	<b>0.01</b>	<b>0.33</b>	<b>0.08</b>
Onsite	<b>2038 Winter</b>						
	Fugitive Dust					0.2267	0.0245
	Off-Road	0.4284	1.574	3.8815	0.0119	0.0343	0.0343
	Total	<b>0.4284</b>	<b>1.574</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.261</b>	<b>0.0588</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	1.90E-03	0.0711	0.0278	2.90E-04	0.0125	3.95E-03
	Worker	8.83E-03	4.68E-03	0.088	3.40E-04	0.0517	0.0139
	Total	<b>0.0107</b>	<b>0.0758</b>	<b>0.1158</b>	<b>6.30E-04</b>	<b>0.0641</b>	<b>0.0178</b>
<b>TOTAL</b>		<b>0.44</b>	<b>1.65</b>	<b>4.00</b>	<b>0.01</b>	<b>0.33</b>	<b>0.07</b>
Onsite	<b>2038</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	0.23	0.02
	Off-Road	0.43	1.57	3.88	0.01	0.03	0.03
	Total	<b>0.43</b>	<b>1.57</b>	<b>3.88</b>	<b>0.01</b>	<b>0.26</b>	<b>0.06</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.07	0.03	0.00	0.01	0.00
	Worker	0.01	0.00	0.11	0.00	0.05	0.01
	Total	<b>0.01</b>	<b>0.08</b>	<b>0.13</b>	<b>0.00</b>	<b>0.06</b>	<b>0.02</b>
<b>TOTAL</b>		<b>0.44</b>	<b>1.65</b>	<b>4.01</b>	<b>0.01</b>	<b>0.33</b>	<b>0.08</b>

**P3 Grading**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2038 Summer</b>						
	Fugitive Dust					2.27E+00	1.10E+00
	Off-Road	7.16E-01	2.87E+00	4.85E+00	1.73E-02	8.74E-02	8.74E-02
	<b>Total</b>	<b>7.16E-01</b>	<b>2.87E+00</b>	<b>4.85E+00</b>	<b>1.73E-02</b>	<b>2.36E+00</b>	<b>1.19E+00</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	4.13E-03	1.35E-01	5.40E-02	5.80E-04	2.50E-02	7.90E-03
	Worker	1.43E-02	7.15E-03	1.70E-01	6.00E-04	8.26E-02	2.22E-02
	<b>Total</b>	<b>1.85E-02</b>	<b>1.42E-01</b>	<b>2.24E-01</b>	<b>1.18E-03</b>	<b>1.08E-01</b>	<b>3.01E-02</b>
<b>TOTAL</b>		<b>0.73</b>	<b>3.01</b>	<b>5.08</b>	<b>0.02</b>	<b>2.47</b>	<b>1.22</b>

Onsite	<b>2038 Winter</b>						
	Fugitive Dust					2.2709	1.0981
	Off-Road	0.7155	2.873	4.8534	0.0173	0.0874	0.0874
	<b>Total</b>	<b>0.7155</b>	<b>2.873</b>	<b>4.8534</b>	<b>0.0173</b>	<b>2.3583</b>	<b>1.1855</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	3.79E-03	0.1423	0.0557	5.90E-04	0.025	7.91E-03
	Worker	0.0141	7.49E-03	0.1408	5.50E-04	0.0826	0.0222
	<b>Total</b>	<b>0.0179</b>	<b>0.1498</b>	<b>0.1964</b>	<b>1.14E-03</b>	<b>0.1076</b>	<b>0.0301</b>
<b>TOTAL</b>		<b>0.73</b>	<b>3.02</b>	<b>5.05</b>	<b>0.02</b>	<b>2.47</b>	<b>1.21</b>

Onsite	<b>2038</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	2.27	1.10
	Off-Road	0.72	2.87	4.85	0.02	0.09	0.09
	<b>Total</b>	<b>0.72</b>	<b>2.87</b>	<b>4.85</b>	<b>0.02</b>	<b>2.36</b>	<b>1.19</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.01	0.01	0.17	0.00	0.08	0.02
	<b>Total</b>	<b>0.02</b>	<b>0.15</b>	<b>0.22</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>		<b>0.73</b>	<b>3.02</b>	<b>5.08</b>	<b>0.02</b>	<b>2.47</b>	<b>1.22</b>

**P3 Building Construction**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2038 Summer</b>						
	Off-Road	0.5761	2.9031	7.1465	1.40E-02	4.23E-02	4.23E-02
	<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>1.40E-02</b>	<b>4.23E-02</b>	<b>4.23E-02</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	8.26E-03	0.2692	1.08E-01	1.17E-03	4.99E-02	1.58E-02
	Worker	3.76E-02	1.88E-02	0.4463	1.58E-03	0.2169	5.83E-02
	<b>Total</b>	<b>4.58E-02</b>	<b>0.288</b>	<b>0.5542</b>	<b>2.75E-03</b>	<b>0.2668</b>	<b>7.41E-02</b>

**TOTAL** **0.62** **3.19** **7.70** **0.02** **0.31** **0.12**

Onsite

**2038 Winter**

Off-Road	0.5761	2.9031	7.1465	0.014	0.0423	0.0423
Total	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.014</b>	<b>0.0423</b>	<b>0.0423</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	7.58E-03	0.2846	0.1113	1.17E-03	0.0499	0.0158
Worker	0.0371	0.0197	0.3695	1.43E-03	0.2169	0.0583
Total	<b>0.0447</b>	<b>0.3042</b>	<b>0.4808</b>	<b>2.60E-03</b>	<b>0.2668</b>	<b>0.0741</b>

**TOTAL**

**0.62** **3.21** **7.63** **0.02** **0.31** **0.12**

Onsite

**2038**

Off-Road	0.58	2.90	7.15	0.01	0.04	0.04
Total	<b>0.58</b>	<b>2.90</b>	<b>7.15</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>

Offsite

Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.28	0.11	0.00	0.05	0.02
Worker	0.04	0.02	0.45	0.00	0.22	0.06
Total	<b>0.05</b>	<b>0.30</b>	<b>0.55</b>	<b>0.00</b>	<b>0.27</b>	<b>0.07</b>

**TOTAL**

**0.62** **3.21** **7.70** **0.02** **0.31** **0.12**

**P3 Paving**

ROG NOx CO SO2 PM10 Total PM2.5 Total

Onsite

**2038 Summer**

Off-Road	0.6458	3.4702	7.4752	0.0133	0.1067	0.1067
Paving	0				0	0
Total	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>	<b>0.1067</b>	<b>0.1067</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0	0	0	0.00E+00	0	0
Worker	0.0322	0.0161	0.3826	1.35E-03	0.1859	0.0499
Total	<b>0.0322</b>	<b>0.0161</b>	<b>0.3826</b>	<b>1.35E-03</b>	<b>0.1859</b>	<b>0.0499</b>

**TOTAL**

**0.68** **3.49** **7.86** **0.01** **0.29** **0.16**

Onsite

**2038 Winter**

Off-Road	0.6458	3.4702	7.4752	0.0133	0.1067	0.1067
Paving	0				0	0
Total	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>	<b>0.1067</b>	<b>0.1067</b>

Offsite

Hauling	0	0	0	0	0	0
Vendor	0	0	0	0.00E+00	0	0
Worker	0.0318	0.0169	0.3167	1.23E-03	0.1859	0.0499
Total	<b>0.0318</b>	<b>0.0169</b>	<b>0.3167</b>	<b>1.23E-03</b>	<b>0.1859</b>	<b>0.0499</b>

**TOTAL**

**0.68** **3.49** **7.79** **0.01** **0.29** **0.16**

Onsite

**2038**

Off-Road	0.65	3.47	7.48	0.01	0.11	0.11
Paving	0.00	0.00	0.00	0.00	0.00	0.00
Total	<b>0.65</b>	<b>3.47</b>	<b>7.48</b>	<b>0.01</b>	<b>0.11</b>	<b>0.11</b>

Offsite

Hauling	0.00	0.00	0.00	0.00	0.00	0.00
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	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.03	0.02	0.38	0.00	0.19	0.05
	Total	<b>0.03</b>	<b>0.02</b>	<b>0.38</b>	<b>0.00</b>	<b>0.19</b>	<b>0.05</b>
<b>TOTAL</b>		<b>0.68</b>	<b>3.49</b>	<b>7.86</b>	<b>0.01</b>	<b>0.29</b>	<b>0.16</b>

### P3 Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2038 Summer</b>						
	Archit. Coating	18.5904				0	0
	Off-Road	0.1179	0.7577	1.7943	2.97E-03	9.90E-03	9.90E-03
	Total	<b>18.7083</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.97E-03</b>	<b>9.90E-03</b>	<b>9.90E-03</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	7.16E-03	3.58E-03	0.085	3.00E-04	0.0413	0.0111
	Total	<b>7.16E-03</b>	<b>3.58E-03</b>	<b>0.085</b>	<b>3.00E-04</b>	<b>0.0413</b>	<b>0.0111</b>
<b>TOTAL</b>		<b>18.72</b>	<b>0.76</b>	<b>1.88</b>	<b>0.00</b>	<b>0.05</b>	<b>0.02</b>

Onsite	<b>2038 Winter</b>						
	Archit. Coating	18.5904				0	0
	Off-Road	0.1179	0.7577	1.7943	2.97E-03	9.90E-03	9.90E-03
	Total	<b>18.7083</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.97E-03</b>	<b>9.90E-03</b>	<b>9.90E-03</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	7.07E-03	3.74E-03	0.0704	2.70E-04	0.0413	0.0111
	Total	<b>7.07E-03</b>	<b>3.74E-03</b>	<b>0.0704</b>	<b>2.70E-04</b>	<b>0.0413</b>	<b>0.0111</b>
<b>TOTAL</b>		<b>18.72</b>	<b>0.76</b>	<b>1.86</b>	<b>0.00</b>	<b>0.05</b>	<b>0.02</b>

Onsite	<b>2038</b>						
	Archit. Coating	18.59	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.12	0.76	1.79	0.00	0.01	0.01
	Total	<b>18.71</b>	<b>0.76</b>	<b>1.79</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.00	0.09	0.00	0.04	0.01
	Total	<b>0.01</b>	<b>0.00</b>	<b>0.09</b>	<b>0.00</b>	<b>0.04</b>	<b>0.01</b>
<b>TOTAL</b>		<b>18.72</b>	<b>0.76</b>	<b>1.88</b>	<b>0.00</b>	<b>0.05</b>	<b>0.02</b>

<b>Phase 3 All Activities Overlap</b>	<b>21.19</b>	<b>12.13</b>	<b>26.53</b>	<b>0.07</b>	<b>3.44</b>	<b>1.59</b>
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### P4 Demolition

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Fugitive Dust					1.2149	0.1839
	Off-Road	0.4996	3.0819	7.4089	0.0133	0.0355	0.0355
	Total	<b>0.4996</b>	<b>3.0819</b>	<b>7.4089</b>	<b>0.0133</b>	<b>1.2504</b>	<b>0.2194</b>
Offsite							
	Hauling	0.0299	1.3261	0.4345	5.60E-03	0.2291	0.0726
	Vendor	4.13E-03	0.1336	0.054	5.60E-04	0.0249	7.90E-03

	Worker	0.0141	7.80E-03	0.1946	7.20E-04	0.1033	0.0277
	Total	0.0482	1.4676	0.6831	6.88E-03	0.3573	0.1082
<b>TOTAL</b>		<b>0.55</b>	<b>4.55</b>	<b>8.09</b>	<b>0.02</b>	<b>1.61</b>	<b>0.33</b>

Onsite	<b>2042 Winter</b>						
	Fugitive Dust					1.2149	0.1839
	Off-Road	0.4996	3.0819	7.4089	0.0133	0.0355	0.0355
	Total	0.4996	3.0819	7.4089	0.0133	1.2504	0.2194

Offsite	Hauling	0.0275	1.3996	0.4423	5.61E-03	0.2291	0.0726
	Vendor	3.79E-03	0.1413	0.0558	5.60E-04	0.025	7.90E-03
	Worker	0.0142	8.16E-03	0.1611	6.50E-04	0.1033	0.0277
	Total	0.0454	1.5491	0.6592	6.82E-03	0.3573	0.1082
<b>TOTAL</b>		<b>0.55</b>	<b>4.63</b>	<b>8.07</b>	<b>0.02</b>	<b>1.61</b>	<b>0.25</b>

Onsite	<b>2042</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	1.21	0.18
	Off-Road	0.50	3.08	7.41	0.01	0.04	0.04
	Total	0.50	3.08	7.41	0.01	1.25	0.22

Offsite	Hauling	0.03	1.40	0.44	0.01	0.23	0.07
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.01	0.01	0.19	0.00	0.10	0.03
	Total	0.05	1.55	0.68	0.01	0.36	0.11
<b>TOTAL</b>		<b>0.55</b>	<b>4.63</b>	<b>8.09</b>	<b>0.02</b>	<b>1.61</b>	<b>0.33</b>

**P4 Site Preparation**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Fugitive Dust					0.2267	0.0245
	Off-Road	0.415	1.4268	3.876	0.0119	0.0277	0.0277
	Total	0.415	1.4268	3.876	0.0119	0.2544	0.0522

Offsite	Hauling	0	0	0	0	0	0
	Vendor	2.07E-03	0.0668	0.027	2.80E-04	0.0125	3.95E-03
	Worker	7.07E-03	3.90E-03	0.0973	3.60E-04	0.0516	0.0139
	Total	9.14E-03	0.0707	0.1243	6.40E-04	0.0641	0.0178
<b>TOTAL</b>		<b>0.42</b>	<b>1.50</b>	<b>4.00</b>	<b>0.01</b>	<b>0.32</b>	<b>0.07</b>

Onsite	<b>2042 Winter</b>						
	Fugitive Dust					0.2267	0.0245
	Off-Road	0.415	1.4268	3.876	0.0119	0.0277	0.0277
	Total	0.415	1.4268	3.876	0.0119	0.2544	0.0522

Offsite

	Hauling	0	0	0	0	0	0
	Vendor	1.89E-03	0.0707	0.0279	2.80E-04	0.0125	3.95E-03
	Worker	7.08E-03	4.08E-03	0.0806	3.30E-04	0.0516	0.0139
	Total	<b>8.97E-03</b>	<b>0.0747</b>	<b>0.1084</b>	<b>6.10E-04</b>	<b>0.0641</b>	<b>0.0178</b>
<b>TOTAL</b>		<b>0.42</b>	<b>1.50</b>	<b>3.98</b>	<b>0.01</b>	<b>0.32</b>	<b>0.07</b>
Onsite	<b>2042</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	0.23	0.02
	Off-Road	0.42	1.43	3.88	0.01	0.03	0.03
	Total	<b>0.42</b>	<b>1.43</b>	<b>3.88</b>	<b>0.01</b>	<b>0.25</b>	<b>0.05</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.07	0.03	0.00	0.01	0.00
	Worker	0.01	0.00	0.10	0.00	0.05	0.01
	Total	<b>0.01</b>	<b>0.07</b>	<b>0.12</b>	<b>0.00</b>	<b>0.06</b>	<b>0.02</b>
<b>TOTAL</b>		<b>0.42</b>	<b>1.50</b>	<b>4.00</b>	<b>0.01</b>	<b>0.32</b>	<b>0.07</b>

**P4 Grading**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Fugitive Dust					2.2709	1.0981
	Off-Road	0.662	2.2462	4.801	0.0173	0.0626	0.0626
	Total	<b>0.662</b>	<b>2.2462</b>	<b>4.801</b>	<b>0.0173</b>	<b>2.3334</b>	<b>1.1606</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	4.13E-03	0.1336	0.054	5.60E-04	0.0249	7.90E-03
	Worker	0.0113	6.24E-03	0.1557	5.80E-04	0.0826	0.0222
	Total	<b>0.0154</b>	<b>0.1399</b>	<b>0.2097</b>	<b>1.14E-03</b>	<b>0.1075</b>	<b>0.0301</b>
<b>TOTAL</b>		<b>0.68</b>	<b>2.39</b>	<b>5.01</b>	<b>0.02</b>	<b>2.44</b>	<b>1.19</b>
Onsite	<b>2042 Winter</b>						
	Fugitive Dust					2.2709	1.0981
	Off-Road	0.662	2.2462	4.801	0.0173	0.0626	0.0626
	Total	<b>0.662</b>	<b>2.2462</b>	<b>4.801</b>	<b>0.0173</b>	<b>2.3334</b>	<b>1.1606</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	3.79E-03	0.1413	0.0558	5.60E-04	0.025	7.90E-03
	Worker	0.0113	6.53E-03	0.1289	5.20E-04	0.0826	0.0222
	Total	<b>0.0151</b>	<b>0.1479</b>	<b>0.1846</b>	<b>1.08E-03</b>	<b>0.1076</b>	<b>0.0301</b>
<b>TOTAL</b>		<b>0.68</b>	<b>2.39</b>	<b>4.99</b>	<b>0.02</b>	<b>2.44</b>	<b>1.18</b>
Onsite	<b>2042</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	2.27	1.10
	Off-Road	0.66	2.25	4.80	0.02	0.06	0.06
	Total	<b>0.66</b>	<b>2.25</b>	<b>4.80</b>	<b>0.02</b>	<b>2.33</b>	<b>1.16</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.01	0.01	0.16	0.00	0.08	0.02
	Total	<b>0.02</b>	<b>0.15</b>	<b>0.21</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>
<b>TOTAL</b>		<b>0.68</b>	<b>2.39</b>	<b>5.01</b>	<b>0.02</b>	<b>2.44</b>	<b>1.19</b>

**P4 Building Construction**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Off-Road	0.5667	2.7853	7.1504	0.014	0.0355	0.0355
	Total	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.014</b>	<b>0.0355</b>	<b>0.0355</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0186	0.6013	0.2431	2.53E-03	0.1123	0.0355
	Worker	0.065	0.0359	0.8952	3.32E-03	0.4749	0.1274
	Total	<b>0.0836</b>	<b>0.6372</b>	<b>1.1382</b>	<b>5.85E-03</b>	<b>0.5872</b>	<b>0.1629</b>
<b>TOTAL</b>		<b>0.65</b>	<b>3.42</b>	<b>8.29</b>	<b>0.02</b>	<b>0.62</b>	<b>0.20</b>
Onsite	<b>2042 Winter</b>						
	Off-Road	0.5667	2.7853	7.1504	0.014	0.0355	0.0355
	Total	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.014</b>	<b>0.0355</b>	<b>0.0355</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.017	0.636	0.2509	2.54E-03	0.1123	0.0355
	Worker	0.0651	0.0375	0.741	3.01E-03	0.4749	0.1274
	Total	<b>0.0822</b>	<b>0.6735</b>	<b>0.9919</b>	<b>5.55E-03</b>	<b>0.5872</b>	<b>0.1629</b>
<b>TOTAL</b>		<b>0.65</b>	<b>3.46</b>	<b>8.14</b>	<b>0.02</b>	<b>0.62</b>	<b>0.20</b>
Onsite	<b>2042</b>						
	Off-Road	0.57	2.79	7.15	0.01	0.04	0.04
	Total	<b>0.57</b>	<b>2.79</b>	<b>7.15</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.02	0.64	0.25	0.00	0.11	0.04
	Worker	0.07	0.04	0.90	0.00	0.47	0.13
	Total	<b>0.08</b>	<b>0.67</b>	<b>1.14</b>	<b>0.01</b>	<b>0.59</b>	<b>0.16</b>
<b>TOTAL</b>		<b>0.65</b>	<b>3.46</b>	<b>8.29</b>	<b>0.02</b>	<b>0.62</b>	<b>0.20</b>

**P4 Paving**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Off-Road	0.609	3.1337	7.4736	0.0133	0.0844	0.0844
	Paving	0				0	0
	Total	<b>0.609</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>	<b>0.0844</b>	<b>0.0844</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0254	0.014	0.3503	1.30E-03	0.1858	0.0499
	Total	<b>0.0254</b>	<b>0.014</b>	<b>0.3503</b>	<b>1.30E-03</b>	<b>0.1858</b>	<b>0.0499</b>
<b>TOTAL</b>		<b>0.63</b>	<b>3.15</b>	<b>7.82</b>	<b>0.01</b>	<b>0.27</b>	<b>0.13</b>
Onsite	<b>2042 Winter</b>						
	Off-Road	0.609	3.1337	7.4736	0.0133	0.0844	0.0844
	Paving	0				0	0

	Total	0.609	3.1337	7.4736	0.0133	0.0844	0.0844
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0255	0.0147	0.29	1.18E-03	0.1858	0.0499
	Total	0.0255	0.0147	0.29	1.18E-03	0.1858	0.0499
<b>TOTAL</b>		<b>0.63</b>	<b>3.15</b>	<b>7.76</b>	<b>0.01</b>	<b>0.27</b>	<b>0.13</b>

Onsite	<b>2042</b>						
	Off-Road	0.61	3.13	7.47	0.01	0.08	0.08
	Paving	0.00	0.00	0.00	0.00	0.00	0.00
	Total	<b>0.61</b>	<b>3.13</b>	<b>7.47</b>	<b>0.01</b>	<b>0.08</b>	<b>0.08</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.03	0.01	0.35	0.00	0.19	0.05
	Total	<b>0.03</b>	<b>0.01</b>	<b>0.35</b>	<b>0.00</b>	<b>0.19</b>	<b>0.05</b>
<b>TOTAL</b>		<b>0.63</b>	<b>3.15</b>	<b>7.82</b>	<b>0.01</b>	<b>0.27</b>	<b>0.13</b>

#### P4 Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2042 Summer</b>						
	Archit. Coating	40.326				0	0
	Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
	Total	<b>40.4409</b>	<b>0.727</b>	<b>1.7923</b>	<b>2.97E-03</b>	<b>7.43E-03</b>	<b>7.43E-03</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0127	7.02E-03	0.1751	6.50E-04	0.0929	0.0249
	Total	<b>0.0127</b>	<b>7.02E-03</b>	<b>0.1751</b>	<b>6.50E-04</b>	<b>0.0929</b>	<b>0.0249</b>
<b>TOTAL</b>		<b>40.45</b>	<b>0.73</b>	<b>1.97</b>	<b>0.00</b>	<b>0.10</b>	<b>0.03</b>

Onsite	<b>2042 Winter</b>						
	Archit. Coating	40.326				0	0
	Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
	Total	<b>40.4409</b>	<b>0.727</b>	<b>1.7923</b>	<b>2.97E-03</b>	<b>7.43E-03</b>	<b>7.43E-03</b>

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0127	7.34E-03	0.145	5.90E-04	0.0929	0.0249
	Total	<b>0.0127</b>	<b>7.34E-03</b>	<b>0.145</b>	<b>5.90E-04</b>	<b>0.0929</b>	<b>0.0249</b>
<b>TOTAL</b>		<b>40.45</b>	<b>0.73</b>	<b>1.94</b>	<b>0.00</b>	<b>0.10</b>	<b>0.03</b>

Onsite	<b>2042</b>						
	Archit. Coating	40.33	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.11	0.73	1.79	0.00	0.01	0.01
	Total	<b>40.44</b>	<b>0.73</b>	<b>1.79</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.18	0.00	0.09	0.02
	Total	<b>0.01</b>	<b>0.01</b>	<b>0.18</b>	<b>0.00</b>	<b>0.09</b>	<b>0.02</b>
<b>TOTAL</b>		<b>40.45</b>	<b>0.73</b>	<b>1.97</b>	<b>0.00</b>	<b>0.10</b>	<b>0.03</b>

<b>Phase 4 All Activities Overlap</b>	<b>42.71</b>	<b>13.47</b>	<b>30.17</b>	<b>0.07</b>	<b>2.92</b>	<b>0.76</b>
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#### P5 Demolition

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2049 Summer</b>						
	Fugitive Dust					1.6759	0.2538
	Off-Road	1.1266	5.7269	12.7926	0.0281	0.098	0.098
	<b>Total</b>	<b>1.1266</b>	<b>5.7269</b>	<b>12.7926</b>	<b>0.0281</b>	<b>1.7739</b>	<b>0.3517</b>
Offsite	Hauling	4.12E-02	1.8282	0.5988	7.58E-03	0.3159	1.00E-01
	Vendor	4.14E-03	0.1335	0.054	5.50E-04	0.0249	7.90E-03
	Worker	0.0162	9.63E-03	0.2431	9.20E-04	0.1342	0.036
	<b>Total</b>	<b>0.0616</b>	<b>1.9713</b>	<b>0.8959</b>	<b>9.05E-03</b>	<b>0.475</b>	<b>0.144</b>
<b>TOTAL</b>	<b>1.19</b>	<b>7.70</b>	<b>13.69</b>	<b>0.04</b>	<b>2.25</b>	<b>0.50</b>	

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2049 Winter</b>						
	Fugitive Dust					1.6759	0.2538
	Off-Road	1.1266	5.7269	12.7926	0.0281	0.098	0.098
	<b>Total</b>	<b>1.1266</b>	<b>5.7269</b>	<b>12.7926</b>	<b>0.0281</b>	<b>1.7739</b>	<b>0.3517</b>
Offsite	Hauling	3.78E-02	1.9297	0.6096	7.59E-03	0.3159	1.00E-01
	Vendor	3.80E-03	0.1412	0.0558	5.50E-04	0.025	7.90E-03
	Worker	0.0164	0.0101	0.2011	8.30E-04	0.1342	0.036
	<b>Total</b>	<b>0.058</b>	<b>2.0809</b>	<b>0.8665</b>	<b>8.97E-03</b>	<b>0.4751</b>	<b>0.144</b>
<b>TOTAL</b>	<b>1.18</b>	<b>7.81</b>	<b>13.66</b>	<b>0.04</b>	<b>2.25</b>	<b>0.39</b>	

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2049</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	1.68	0.25
	Off-Road	1.13	5.73	12.79	0.03	0.10	0.10
	<b>Total</b>	<b>1.13</b>	<b>5.73</b>	<b>12.79</b>	<b>0.03</b>	<b>1.77</b>	<b>0.35</b>
Offsite	Hauling	0.04	1.93	0.61	0.01	0.32	0.10
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01
	Worker	0.02	0.01	0.24	0.00	0.13	0.04
	<b>Total</b>	<b>0.06</b>	<b>2.08</b>	<b>0.90</b>	<b>0.01</b>	<b>0.48</b>	<b>0.14</b>
<b>TOTAL</b>	<b>1.19</b>	<b>7.81</b>	<b>13.69</b>	<b>0.04</b>	<b>2.25</b>	<b>0.50</b>	

**P5 Site Preparation**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2049 Summer</b>						
	Fugitive Dust					2.6788	1.2843
	Off-Road	0.8008	2.6618	5.7438	0.0211	0.075	0.075
	<b>Total</b>	<b>0.8008</b>	<b>2.6618</b>	<b>5.7438</b>	<b>0.0211</b>	<b>2.7538</b>	<b>1.3592</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	4.14E-03	0.1335	0.054	5.50E-04	0.0249	7.90E-03
	Worker	9.98E-03	5.93E-03	0.1496	5.70E-04	0.0826	0.0221
	<b>Total</b>	<b>0.0141</b>	<b>0.1394</b>	<b>0.2037</b>	<b>1.12E-03</b>	<b>0.1075</b>	<b>0.03</b>
<b>TOTAL</b>	<b>0.81</b>	<b>2.80</b>	<b>5.95</b>	<b>0.02</b>	<b>2.86</b>	<b>1.39</b>	

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2049 Winter</b>						
	Fugitive Dust					2.6788	1.2843
	Off-Road	0.8008	2.6618	5.7438	0.0211	0.075	0.075
	<b>Total</b>	<b>0.8008</b>	<b>2.6618</b>	<b>5.7438</b>	<b>0.0211</b>	<b>2.7538</b>	<b>1.3592</b>
Offsite	Hauling	0	0	0	0	0	0
	Vendor	3.80E-03	0.1412	0.0558	5.50E-04	0.025	7.90E-03
	Worker	0.0101	6.20E-03	0.1238	5.10E-04	0.0826	0.0221
	<b>Total</b>	<b>0.0139</b>	<b>0.1474</b>	<b>0.1796</b>	<b>1.06E-03</b>	<b>0.1075</b>	<b>0.03</b>
<b>TOTAL</b>	<b>0.81</b>	<b>2.81</b>	<b>5.92</b>	<b>0.02</b>	<b>2.86</b>	<b>1.38</b>	

Onsite		<b>2049</b>						
	Fugitive Dust	0.00	0.00	0.00	0.00	2.68	1.28	
	Off-Road	0.80	2.66	5.74	0.02	0.08	0.08	
	<b>Total</b>	<b>0.80</b>	<b>2.66</b>	<b>5.74</b>	<b>0.02</b>	<b>2.75</b>	<b>1.36</b>	
Offsite								
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00	
	Vendor	0.00	0.14	0.06	0.00	0.03	0.01	
	Worker	0.01	0.01	0.15	0.00	0.08	0.02	
	<b>Total</b>	<b>0.01</b>	<b>0.15</b>	<b>0.20</b>	<b>0.00</b>	<b>0.11</b>	<b>0.03</b>	
<b>TOTAL</b>		<b>0.81</b>	<b>2.81</b>	<b>5.95</b>	<b>0.02</b>	<b>2.86</b>	<b>1.39</b>	

**P5 Grading**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2049 Summer</b>					
	Fugitive Dust					3.0278	1.4641
	Off-Road	0.9764	3.5432	7.7686	0.0252	0.0893	0.0893
	<b>Total</b>	<b>0.9764</b>	<b>3.5432</b>	<b>7.7686</b>	<b>0.0252</b>	<b>3.1171</b>	<b>1.5534</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	6.21E-03	0.2002	0.0811	8.30E-04	0.0374	0.0118
	Worker	0.0125	7.41E-03	0.187	7.10E-04	0.1032	0.0277
	<b>Total</b>	<b>0.0187</b>	<b>0.2076</b>	<b>0.2681</b>	<b>1.54E-03</b>	<b>0.1406</b>	<b>0.0395</b>
<b>TOTAL</b>		<b>1.00</b>	<b>3.75</b>	<b>8.04</b>	<b>0.03</b>	<b>3.26</b>	<b>1.59</b>

Onsite		<b>2049 Winter</b>					
	Fugitive Dust					3.0278	1.4641
	Off-Road	0.9764	3.5432	7.7686	0.0252	0.0893	0.0893
	<b>Total</b>	<b>0.9764</b>	<b>3.5432</b>	<b>7.7686</b>	<b>0.0252</b>	<b>3.1171</b>	<b>1.5534</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	5.70E-03	0.2118	0.0837	8.30E-04	0.0374	0.0119
	Worker	0.0126	7.75E-03	0.1547	6.40E-04	0.1032	0.0277
	<b>Total</b>	<b>0.0183</b>	<b>0.2196</b>	<b>0.2384</b>	<b>1.47E-03</b>	<b>0.1406</b>	<b>0.0395</b>
<b>TOTAL</b>		<b>0.99</b>	<b>3.76</b>	<b>8.01</b>	<b>0.03</b>	<b>3.26</b>	<b>1.58</b>

Onsite		<b>2049</b>					
	Fugitive Dust	0.00	0.00	0.00	0.00	3.03	1.46
	Off-Road	0.98	3.54	7.77	0.03	0.09	0.09
	<b>Total</b>	<b>0.98</b>	<b>3.54</b>	<b>7.77</b>	<b>0.03</b>	<b>3.12</b>	<b>1.55</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.21	0.08	0.00	0.04	0.01
	Worker	0.01	0.01	0.19	0.00	0.10	0.03
	<b>Total</b>	<b>0.02</b>	<b>0.22</b>	<b>0.27</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>
<b>TOTAL</b>		<b>1.00</b>	<b>3.76</b>	<b>8.04</b>	<b>0.03</b>	<b>3.26</b>	<b>1.59</b>

**P5 Building Construction**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2049 Summer</b>					
	Off-Road	0.9653	6.2823	12.0407	0.0238	0.0525	0.0525
	<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>	<b>0.0525</b>	<b>0.0525</b>
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0269	0.8677	0.3513	3.59E-03	0.1621	0.0513
	Worker	0.0836	0.0497	1.253	4.74E-03	0.6916	0.1854
	<b>Total</b>	<b>0.1105</b>	<b>0.9173</b>	<b>1.6042</b>	<b>8.33E-03</b>	<b>0.8537</b>	<b>0.2367</b>
<b>TOTAL</b>		<b>1.08</b>	<b>7.20</b>	<b>13.64</b>	<b>0.03</b>	<b>0.91</b>	<b>0.29</b>

Onsite	<b>2049 Winter</b>					
Off-Road	0.9653	6.2823	12.0407	0.0238	0.0525	0.0525
Total	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>	<b>0.0525</b>	<b>0.0525</b>
Offsite						
Hauling	0	0	0	0	0	0
Vendor	0.0247	0.9178	0.3626	3.60E-03	0.1622	0.0513
Worker	0.0845	0.052	1.0366	4.30E-03	0.6916	0.1854
Total	<b>0.1092</b>	<b>0.9697</b>	<b>1.3992</b>	<b>7.90E-03</b>	<b>0.8537</b>	<b>0.2367</b>
<b>TOTAL</b>	<b>1.07</b>	<b>7.25</b>	<b>13.44</b>	<b>0.03</b>	<b>0.91</b>	<b>0.29</b>

Onsite	<b>2049</b>					
Off-Road	0.97	6.28	12.04	0.02	0.05	0.05
Total	<b>0.97</b>	<b>6.28</b>	<b>12.04</b>	<b>0.02</b>	<b>0.05</b>	<b>0.05</b>
Offsite						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.92	0.36	0.00	0.16	0.05
Worker	0.08	0.05	1.25	0.00	0.69	0.19
Total	<b>0.11</b>	<b>0.97</b>	<b>1.60</b>	<b>0.01</b>	<b>0.85</b>	<b>0.24</b>
<b>TOTAL</b>	<b>1.08</b>	<b>7.25</b>	<b>13.64</b>	<b>0.03</b>	<b>0.91</b>	<b>0.29</b>

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2050 Summer</b>					
Off-Road	0.9653	6.2823	12.0407	0.0238	0.0525	0.0525
Total	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>	<b>0.0525</b>	<b>0.0525</b>
Offsite						
Hauling	0	0	0	0	0	0
Vendor	0.0269	0.8689	0.348	3.57E-03	0.1621	0.0513
Worker	0.0795	0.0495	1.2397	4.70E-03	0.6915	0.1853
Total	<b>0.1063</b>	<b>0.9184</b>	<b>1.5877</b>	<b>8.27E-03</b>	<b>0.8536</b>	<b>0.2367</b>
<b>TOTAL</b>	<b>1.07</b>	<b>7.20</b>	<b>13.63</b>	<b>0.03</b>	<b>0.91</b>	<b>0.29</b>

Onsite	<b>2050 Winter</b>					
Off-Road	0.9653	6.2823	12.0407	0.0238	0.0525	0.0525
Total	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>	<b>0.0525</b>	<b>0.0525</b>
Offsite						
Hauling	0	0	0	0	0	0
Vendor	0.0247	0.9191	0.3591	3.58E-03	0.1621	0.0513
Worker	0.0808	0.0518	1.0249	4.26E-03	0.6915	0.1853
Total	<b>0.1054</b>	<b>0.9709</b>	<b>1.384</b>	<b>7.84E-03</b>	<b>0.8537</b>	<b>0.2367</b>
<b>TOTAL</b>	<b>1.07</b>	<b>7.25</b>	<b>13.42</b>	<b>0.03</b>	<b>0.91</b>	<b>0.29</b>

Onsite	<b>2050</b>					
Off-Road	0.97	6.28	12.04	0.02	0.05	0.05
Total	<b>0.97</b>	<b>6.28</b>	<b>12.04</b>	<b>0.02</b>	<b>0.05</b>	<b>0.05</b>
Offsite						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.92	0.36	0.00	0.16	0.05
Worker	0.08	0.05	1.24	0.00	0.69	0.19
Total	<b>0.11</b>	<b>0.97</b>	<b>1.59</b>	<b>0.01</b>	<b>0.85</b>	<b>0.24</b>
<b>TOTAL</b>	<b>1.07</b>	<b>7.25</b>	<b>13.63</b>	<b>0.03</b>	<b>0.91</b>	<b>0.29</b>

<b>P5 Paving</b>						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2050 Summer</b>					
Off-Road	0.6431	2.8019	9.4422	0.0165	0.0712	0.0712
Paving	0				0	0



	Total	0.6431	2.8019	9.4422	0.0165	0.0712	0.0712
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0154	9.60E-03	0.2405	9.10E-04	0.1342	0.036
	Total	0.0154	9.60E-03	0.2405	9.10E-04	0.1342	0.036
<b>TOTAL</b>		<b>0.66</b>	<b>2.81</b>	<b>9.68</b>	<b>0.02</b>	<b>0.21</b>	<b>0.11</b>

Onsite	<b>2050 Winter</b>						
	Off-Road	0.6431	2.8019	9.4422	0.0165	0.0712	0.0712
	Paving	0				0	0
	Total	0.6431	2.8019	9.4422	0.0165	0.0712	0.0712

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0.00E+00	0	0
	Worker	0.0157	0.01	0.1989	8.30E-04	0.1342	0.036
	Total	0.0157	0.01	0.1989	8.30E-04	0.1342	0.036
<b>TOTAL</b>		<b>0.66</b>	<b>2.81</b>	<b>9.64</b>	<b>0.02</b>	<b>0.21</b>	<b>0.11</b>

Onsite	<b>2050</b>						
	Off-Road	0.64	2.80	9.44	0.02	0.07	0.07
	Paving	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.64	2.80	9.44	0.02	0.07	0.07

Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.24	0.00	0.13	0.04
	Total	0.02	0.01	0.24	0.00	0.13	0.04
<b>TOTAL</b>		<b>0.66</b>	<b>2.81</b>	<b>9.68</b>	<b>0.02</b>	<b>0.21</b>	<b>0.11</b>

**P5 Architectural Coating**

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	<b>2050 Summer</b>						
	Archit. Coating	29.4167				0	0
	Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
	Total	29.5316	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0154	9.60E-03	0.2405	9.10E-04	0.1342	0.036
	Total	0.0154	9.60E-03	0.2405	9.10E-04	0.1342	0.036
<b>TOTAL</b>		<b>29.55</b>	<b>0.74</b>	<b>2.03</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>

Onsite	<b>2050 Winter</b>						
	Archit. Coating	29.4167				0	0
	Off-Road	0.1149	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03
	Total	29.5316	0.727	1.7923	2.97E-03	7.43E-03	7.43E-03

Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0157	0.01	0.1989	8.30E-04	0.1342	0.036
	Total	0.0157	0.01	0.1989	8.30E-04	0.1342	0.036
<b>TOTAL</b>		<b>29.55</b>	<b>0.74</b>	<b>1.99</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>

Onsite	<b>2050</b>						
	Archit. Coating	29.42	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.11	0.73	1.79	0.00	0.01	0.01

Offsite	Total	<b>29.53</b>	<b>0.73</b>	<b>1.79</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.24	0.00	0.13	0.04
	Total	<b>0.02</b>	<b>0.01</b>	<b>0.24</b>	<b>0.00</b>	<b>0.13</b>	<b>0.04</b>
<b>TOTAL</b>	<b>29.55</b>	<b>0.74</b>	<b>2.03</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>	
	Phase 1 Maximum Daily	<b>26.64</b>	<b>20.64</b>	<b>37.56</b>	<b>0.07</b>	<b>7.58</b>	<b>3.87</b>
	Phase 2 Maximum Daily	<b>24.55</b>	<b>10.19</b>	<b>13.95</b>	<b>0.04</b>	<b>2.80</b>	<b>1.34</b>
	Phase 3 Maximum Daily	<b>18.72</b>	<b>3.49</b>	<b>7.86</b>	<b>0.02</b>	<b>2.47</b>	<b>1.22</b>
	Phase 4 Maximum Daily	<b>40.45</b>	<b>4.63</b>	<b>8.29</b>	<b>0.02</b>	<b>2.44</b>	<b>1.19</b>
	Phase 5 Maximum Daily	<b>29.55</b>	<b>7.81</b>	<b>13.69</b>	<b>0.04</b>	<b>3.26</b>	<b>1.59</b>
	Phase 5 All Activities Overlap	<b>32.40</b>	<b>21.02</b>	<b>41.03</b>	<b>0.11</b>	<b>3.48</b>	<b>1.82</b>
	Individual Development Phase Worst-Case Scenario Max Daily	<b>42.71</b>	<b>80.06</b>	<b>126.62</b>	<b>0.26</b>	<b>19.15</b>	<b>8.66</b>
	Regional Thresholds	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
	Exceeds Thresholds?	No	No	No	No	No	No
	Phase 1 - All Activities Overlap Maximum Daily	<b>35.71</b>	<b>80.06</b>	<b>126.62</b>	<b>0.26</b>	<b>19.15</b>	<b>8.66</b>
	Phase 2 - All Activities Overlap Maximum Daily	<b>28.77</b>	<b>35.32</b>	<b>62.11</b>	<b>0.14</b>	<b>8.92</b>	<b>3.72</b>
	Phase 3 - All Activities Overlap Maximum Daily	<b>21.19</b>	<b>12.13</b>	<b>26.53</b>	<b>0.07</b>	<b>3.44</b>	<b>1.59</b>
	Phase 4 - All Activities Overlap Maximum Daily	<b>42.71</b>	<b>13.47</b>	<b>30.17</b>	<b>0.07</b>	<b>2.92</b>	<b>0.76</b>
	Phase 5 - All Activities Overlap Maximum Daily	<b>26.64</b>	<b>20.64</b>	<b>37.56</b>	<b>0.07</b>	<b>7.58</b>	<b>3.87</b>
	Activities Overlap Worst-Case Scenario Max Daily	<b>42.71</b>	<b>80.06</b>	<b>126.62</b>	<b>0.26</b>	<b>19.15</b>	<b>8.66</b>
	Regional Thresholds	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
	Exceeds Thresholds?	No	No	No	No	No	No

# Localized Construction Emissions Worksheet - Unmitigated

\*CalEEMod, Version 2020.4.0

<b>P1 Demolition</b>						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2026</b>				
	Fugitive Dust				1.3503	0.2044
	Off-Road		19.1966	19.4184	0.8528	0.792
	<b>Total</b>		<b>19.1966</b>	<b>19.4184</b>	<b>2.203</b>	<b>0.9964</b>
<b>TOTAL</b>			<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>
Onsite		<b>2026</b>				
	Fugitive Dust				1.3503	0.2044
	Off-Road		19.1966	19.4184	0.8528	0.792
	<b>Total</b>		<b>19.1966</b>	<b>19.4184</b>	<b>2.203</b>	<b>0.9964</b>
<b>TOTAL</b>			<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>
Onsite		<b>2026</b>				
	Fugitive Dust		0.00	0.00	1.35	0.20
	Off-Road		19.20	19.42	0.85	0.79
	<b>Total</b>		<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>
<b>TOTAL</b>			<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>

<b>≤1.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?	No	No	No	No

<b>Site Preparation</b>						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2026</b>				
	Fugitive Dust				8.4034	4.3188
	Off-Road		25.2339	17.9118	1.0868	0.9999
	<b>Total</b>		<b>25.2339</b>	<b>17.9118</b>	<b>9.4902</b>	<b>5.3187</b>
<b>TOTAL</b>			<b>25.23</b>	<b>17.91</b>	<b>9.49</b>	<b>5.32</b>
Onsite		<b>2026</b>				
	Fugitive Dust				8.4034	4.3188
	Off-Road		25.2339	17.9118	1.0868	0.9999
	<b>Total</b>		<b>25.2339</b>	<b>17.9118</b>	<b>9.4902</b>	<b>5.3187</b>
<b>TOTAL</b>			<b>25.23</b>	<b>17.91</b>	<b>9.49</b>	<b>5.32</b>
Onsite		<b>2026</b>				
	Fugitive Dust		0.00	0.00	8.40	4.32
	Off-Road		25.23	17.91	1.09	1.00
	<b>Total</b>		<b>25.23</b>	<b>17.91</b>	<b>9.49</b>	<b>5.32</b>
<b>TOTAL</b>			<b>25.23</b>	<b>17.91</b>	<b>9.49</b>	<b>5.32</b>

<b>3.50-Acre Screening-Level LSTs<sup>4</sup></b>	<b>220</b>	<b>1,712</b>	<b>10.99</b>	<b>7.00</b>
Exceeds Thresholds?	No	No	No	No

### P1 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2026</b>				
	Fugitive Dust			3.9345	1.562
	Off-Road	27.9429	26.3311	1.1309	1.0404
	<b>Total</b>	<b>27.9429</b>	<b>26.3311</b>	<b>5.0654</b>	<b>2.6024</b>
<b>TOTAL</b>		<b>27.94</b>	<b>26.33</b>	<b>5.07</b>	<b>2.60</b>
Onsite	<b>2026</b>				
	Fugitive Dust			3.9345	1.562
	Off-Road	27.9429	26.3311	1.1309	1.0404
	<b>Total</b>	<b>27.9429</b>	<b>26.3311</b>	<b>5.0654</b>	<b>2.6024</b>
<b>TOTAL</b>		<b>27.94</b>	<b>26.33</b>	<b>5.07</b>	<b>2.60</b>
Onsite	<b>2026</b>				
	Fugitive Dust	0.00	0.00	3.93	1.56
	Off-Road	27.94	26.33	1.13	1.04
	<b>Total</b>	<b>27.94</b>	<b>26.33</b>	<b>5.07</b>	<b>2.60</b>
<b>TOTAL</b>		<b>27.94</b>	<b>26.33</b>	<b>5.07</b>	<b>2.60</b>
<b>4.00-Acre Screening-Level LSTs<sup>4</sup></b>		<b>237</b>	<b>1,872</b>	<b>12.66</b>	<b>7.67</b>
Exceeds Thresholds?		No	No	No	No

### P1 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2026</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	<b>Total</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.5276</b>	<b>0.4963</b>
<b>TOTAL</b>		<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
Onsite	<b>2026</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	<b>Total</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.5276</b>	<b>0.4963</b>
<b>TOTAL</b>		<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
Onsite	<b>2026</b>				
	Off-Road	12.47	16.08	0.53	0.50
	<b>Total</b>	<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
<b>TOTAL</b>		<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
<b>1.31-Acre Screening-Level LSTs<sup>4</sup></b>		<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?		No	No	No	No

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2027</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	<b>Total</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.5276</b>	<b>0.4963</b>

**TOTAL** **12.47** **16.08** **0.53** **0.50**

Onsite	<b>2027</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	Total	12.4697	16.0847	0.5276	0.4963

**TOTAL** **12.47** **16.08** **0.53** **0.50**

Onsite	<b>2027</b>				
	Off-Road	12.47	16.08	0.53	0.50
	Total	12.47	16.08	0.53	0.50

**TOTAL** **12.47** **16.08** **0.53** **0.50**

<b>1.31-Acre Screening-Level LSTs<sup>4</sup></b>	<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?	No	No	No	No

**P1 Paving**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2027</b>				
	Off-Road	8.5816	14.578	0.4185	0.385
	Paving			0	0
	Total	8.5816	14.578	0.4185	0.385

**TOTAL** **8.58** **14.58** **0.42** **0.39**

Onsite	<b>2027</b>				
	Off-Road	8.5816	14.578	0.4185	0.385
	Paving			0	0
	Total	8.5816	14.578	0.4185	0.385

**TOTAL** **8.58** **14.58** **0.42** **0.39**

Onsite	<b>2027</b>				
	Off-Road	8.58	14.58	0.42	0.39
	Paving	0.00	0.00	0.00	0.00
	Total	8.58	14.58	0.42	0.39

**TOTAL** **8.58** **14.58** **0.42** **0.39**

<b>≤1.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?	No	No	No	No

**P1 Architectural Coating**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2027</b>				
	Archit. Coating			0	0
	Off-Road	1.1455	1.8091	0.0515	0.0515
	Total	1.1455	1.8091	0.0515	0.0515

**TOTAL** **1.15** **1.81** **0.05** **0.05**

Onsite	<b>2027</b>				
	Archit. Coating			0	0

	Off-Road	1.1455	1.8091	0.0515	0.0515
	Total	1.1455	1.8091	0.0515	0.0515
<b>TOTAL</b>		<b>1.15</b>	<b>1.81</b>	<b>0.05</b>	<b>0.05</b>

Onsite	<b>2027</b>				
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	1.15	1.81	0.05	0.05
	Total	1.15	1.81	0.05	0.05
<b>TOTAL</b>		<b>1.15</b>	<b>1.81</b>	<b>0.05</b>	<b>0.05</b>

<b>≤1.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 1 All Activities Overlap</b>	<b>94.57</b>	<b>96.13</b>	<b>17.76</b>	<b>9.85</b>
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<b>5.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>270</b>	<b>2,193</b>	<b>15.99</b>	<b>9.00</b>
Exceeds Thresholds?	No	No	Yes	Yes

### P2 Demolition

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2030</b>				
	Fugitive Dust			1.6974	0.257
	Off-Road	8.0078	12.9685	0.2148	0.2148
	Total	8.0078	12.9685	1.9122	0.4718
<b>TOTAL</b>		<b>8.01</b>	<b>12.97</b>	<b>1.91</b>	<b>0.47</b>

Onsite	<b>2030</b>				
	Fugitive Dust			1.6974	0.257
	Off-Road	8.0078	12.9685	0.2148	0.2148
	Total	8.0078	12.9685	1.9122	0.4718
<b>TOTAL</b>		<b>8.01</b>	<b>12.97</b>	<b>1.91</b>	<b>0.47</b>

Onsite	<b>2030</b>				
	Fugitive Dust	0.00	0.00	1.70	0.26
	Off-Road	8.01	12.97	0.21	0.21
	Total	8.01	12.97	1.91	0.47
<b>TOTAL</b>		<b>8.01</b>	<b>12.97</b>	<b>1.91</b>	<b>0.47</b>

<b>1.23-Acre Screening-Level LSTs<sup>4</sup></b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P2 Site Preparation

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2030</b>				
	Fugitive Dust			2.6788	1.2843
	Off-Road	4.7401	5.9133	0.1567	0.1567
	Total	4.7401	5.9133	2.8355	1.4409
<b>TOTAL</b>		<b>4.74</b>	<b>5.91</b>	<b>2.84</b>	<b>1.44</b>

Onsite		<b>2030</b>			
	Fugitive Dust			2.6788	1.2843
	Off-Road	4.7401	5.9133	0.1567	0.1567
	Total	4.7401	5.9133	2.8355	1.4409
<b>TOTAL</b>		<b>4.74</b>	<b>5.91</b>	<b>2.84</b>	<b>1.44</b>

Onsite		<b>2030</b>			
	Fugitive Dust	0.00	0.00	2.68	1.28
	Off-Road	4.74	5.91	0.16	0.16
	Total	4.74	5.91	2.84	1.44
<b>TOTAL</b>		<b>4.74</b>	<b>5.91</b>	<b>2.84</b>	<b>1.44</b>

<b>1.23-Acre Screening-Level LSTs</b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P2 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2030</b>			
	Fugitive Dust			3.0278	1.4641
	Off-Road	5.9092	7.9601	0.1859	0.1859
	Total	5.9092	7.9601	3.2137	1.65
<b>TOTAL</b>		<b>5.91</b>	<b>7.96</b>	<b>3.21</b>	<b>1.65</b>

Onsite		<b>2030</b>			
	Fugitive Dust			3.0278	1.4641
	Off-Road	5.9092	7.9601	0.1859	0.1859
	Total	5.9092	7.9601	3.2137	1.65
<b>TOTAL</b>		<b>5.91</b>	<b>7.96</b>	<b>3.21</b>	<b>1.65</b>

Onsite		<b>2030</b>			
	Fugitive Dust	0.00	0.00	3.03	1.46
	Off-Road	5.91	7.96	0.19	0.19
	Total	5.91	7.96	3.21	1.65
<b>TOTAL</b>		<b>5.91</b>	<b>7.96</b>	<b>3.21</b>	<b>1.65</b>

<b>1.23-Acre Screening-Level LSTs</b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P2 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2030</b>			
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	7.1882	12.1101	0.127	0.127
<b>TOTAL</b>		<b>7.19</b>	<b>12.11</b>	<b>0.13</b>	<b>0.13</b>

Onsite		<b>2030</b>			
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	7.1882	12.1101	0.127	0.127

**TOTAL** **7.19** **12.11** **0.13** **0.13**

Onsite **2030**  
 Off-Road 7.19 12.11 0.13 0.13  
 Total **7.19** **12.11** **0.13** **0.13**

**TOTAL** **7.19** **12.11** **0.13** **0.13**

**≤1.00-Acre Screening-Level LSTs** **118** **863** **11.36** **5.41**  
 Exceeds Thresholds? No No No No

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	<b>7.1882</b>	<b>12.1101</b>	<b>0.127</b>	<b>0.127</b>
<b>TOTAL</b>		<b>7.19</b>	<b>12.11</b>	<b>0.13</b>	<b>0.13</b>

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	<b>7.1882</b>	<b>12.1101</b>	<b>0.127</b>	<b>0.127</b>
<b>TOTAL</b>		<b>7.19</b>	<b>12.11</b>	<b>0.13</b>	<b>0.13</b>

Onsite **2031**  
 Off-Road 7.19 12.11 0.13 0.13  
 Total **7.19** **12.11** **0.13** **0.13**

**TOTAL** **7.19** **12.11** **0.13** **0.13**

**≤1.00-Acre Screening-Level LSTs** **118** **863** **11.36** **5.41**  
 Exceeds Thresholds? No No No No

**P2 Paving**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	4.3905	9.4567	0.1728	0.1728
	Paving			0	0
	Total	<b>4.3905</b>	<b>9.4567</b>	<b>0.1728</b>	<b>0.1728</b>
<b>TOTAL</b>		<b>4.39</b>	<b>9.46</b>	<b>0.17</b>	<b>0.17</b>

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	4.3905	9.4567	0.1728	0.1728
	Paving			0	0
	Total	<b>4.3905</b>	<b>9.4567</b>	<b>0.1728</b>	<b>0.1728</b>
<b>TOTAL</b>		<b>4.39</b>	<b>9.46</b>	<b>0.17</b>	<b>0.17</b>

Onsite **2031**  
 Off-Road 4.39 9.46 0.17 0.17  
 Paving 0.00 0.00 0.00 0.00  
 Total **4.39** **9.46** **0.17** **0.17**

**TOTAL** **4.39** **9.46** **0.17** **0.17**



<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P2 Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Archit. Coating			0	0
	Off-Road	0.8563	1.7977	0.0203	0.0203
	<b>Total</b>	<b>0.8563</b>	<b>1.7977</b>	<b>0.0203</b>	<b>0.0203</b>
<b>TOTAL</b>		<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>

Onsite	<b>2031</b>				
	Archit. Coating			0	0
	Off-Road	0.8563	1.7977	0.0203	0.0203
	<b>Total</b>	<b>0.8563</b>	<b>1.7977</b>	<b>0.0203</b>	<b>0.0203</b>
<b>TOTAL</b>		<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>

Onsite	<b>2031</b>				
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	0.86	1.80	0.02	0.02
	<b>Total</b>	<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>
<b>TOTAL</b>		<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 2 All Activities Overlap</b>	<b>31.09</b>	<b>50.21</b>	<b>8.28</b>	<b>3.88</b>
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<b>1.23-Acre Screening-Level LSTs<sup>4</sup></b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P3 Site Preparation

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Fugitive Dust			2.27E-01	2.45E-02
	Off-Road	1.57E+00	3.88E+00	3.43E-02	3.43E-02
	<b>Total</b>	<b>1.57E+00</b>	<b>3.88E+00</b>	<b>2.61E-01</b>	<b>5.88E-02</b>
<b>TOTAL</b>		<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>

Onsite	<b>2038</b>				
	Fugitive Dust			0.2267	0.0245
	Off-Road	1.574	3.8815	0.0343	0.0343
	<b>Total</b>	<b>1.574</b>	<b>3.8815</b>	<b>0.261</b>	<b>0.0588</b>
<b>TOTAL</b>		<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>

Onsite	<b>2038</b>				
	Fugitive Dust	0.00	0.00	0.23	0.02

	Off-Road	1.57	3.88	0.03	0.03
	Total	<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>
<b>TOTAL</b>		<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P3 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Fugitive Dust			2.27E+00	1.10E+00
	Off-Road	2.87E+00	4.85E+00	8.74E-02	8.74E-02
	Total	<b>2.87E+00</b>	<b>4.85E+00</b>	<b>2.36E+00</b>	<b>1.19E+00</b>
<b>TOTAL</b>		<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>

Onsite	<b>2038</b>				
	Fugitive Dust			2.2709	1.0981
	Off-Road	2.873	4.8534	0.0874	0.0874
	Total	<b>2.873</b>	<b>4.8534</b>	<b>2.3583</b>	<b>1.1855</b>
<b>TOTAL</b>		<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>

Onsite	<b>2038</b>				
	Fugitive Dust	0.00	0.00	2.27	1.10
	Off-Road	2.87	4.85	0.09	0.09
	Total	<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>
<b>TOTAL</b>		<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P3 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Off-Road	2.9031	7.1465	4.23E-02	4.23E-02
	Total	<b>2.9031</b>	<b>7.1465</b>	<b>4.23E-02</b>	<b>4.23E-02</b>
<b>TOTAL</b>		<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2038</b>				
	Off-Road	2.9031	7.1465	0.0423	0.0423
	Total	<b>2.9031</b>	<b>7.1465</b>	<b>0.0423</b>	<b>0.0423</b>
<b>TOTAL</b>		<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2038</b>				
	Off-Road	2.90	7.15	0.04	0.04
	Total	<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>
<b>TOTAL</b>		<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
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Exceeds Thresholds?	No	No	No	No
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### P3 Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Off-Road	3.4702	7.4752	0.1067	0.1067
	Paving			0	0
	Total	<b>3.4702</b>	<b>7.4752</b>	<b>0.1067</b>	<b>0.1067</b>
<b>TOTAL</b>		<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>

Onsite	<b>2038</b>				
	Off-Road	3.4702	7.4752	0.1067	0.1067
	Paving			0	0
	Total	<b>3.4702</b>	<b>7.4752</b>	<b>0.1067</b>	<b>0.1067</b>
<b>TOTAL</b>		<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>

Onsite	<b>2038</b>				
	Off-Road	3.47	7.48	0.11	0.11
	Paving	0.00	0.00	0.00	0.00
	Total	<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>
<b>TOTAL</b>		<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P3 Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Archit. Coating			0	0
	Off-Road	0.7577	1.7943	9.90E-03	9.90E-03
	Total	<b>0.7577</b>	<b>1.7943</b>	<b>9.90E-03</b>	<b>9.90E-03</b>
<b>TOTAL</b>		<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite	<b>2038</b>				
	Archit. Coating			0	0
	Off-Road	0.7577	1.7943	9.90E-03	9.90E-03
	Total	<b>0.7577</b>	<b>1.7943</b>	<b>9.90E-03</b>	<b>9.90E-03</b>
<b>TOTAL</b>		<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite	<b>2038</b>				
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	0.76	1.79	0.01	0.01
	Total	<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>
<b>TOTAL</b>		<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 3 All Activities Overlap</b>	<b>11.58</b>	<b>25.15</b>	<b>2.78</b>	<b>1.40</b>
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<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

**P4 Demolition**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Fugitive Dust			1.2149	0.1839
	Off-Road	3.0819	7.4089	0.0355	0.0355
	<b>Total</b>	<b>3.0819</b>	<b>7.4089</b>	<b>1.2504</b>	<b>0.2194</b>
<b>TOTAL</b>		<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>

Onsite	<b>2042</b>				
	Fugitive Dust			1.2149	0.1839
	Off-Road	3.0819	7.4089	0.0355	0.0355
	<b>Total</b>	<b>3.0819</b>	<b>7.4089</b>	<b>1.2504</b>	<b>0.2194</b>
<b>TOTAL</b>		<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>

Onsite	<b>2042</b>				
	Fugitive Dust	0.00	0.00	1.21	0.18
	Off-Road	3.08	7.41	0.04	0.04
	<b>Total</b>	<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>
<b>TOTAL</b>		<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

**P4 Site Preparation**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Fugitive Dust			0.2267	0.0245
	Off-Road	1.4268	3.876	0.0277	0.0277
	<b>Total</b>	<b>1.4268</b>	<b>3.876</b>	<b>0.2544</b>	<b>0.0522</b>
<b>TOTAL</b>		<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>

Onsite	<b>2042</b>				
	Fugitive Dust			0.2267	0.0245
	Off-Road	1.4268	3.876	0.0277	0.0277
	<b>Total</b>	<b>1.4268</b>	<b>3.876</b>	<b>0.2544</b>	<b>0.0522</b>
<b>TOTAL</b>		<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>

Onsite	<b>2042</b>				
	Fugitive Dust	0.00	0.00	0.23	0.02
	Off-Road	1.43	3.88	0.03	0.03
	<b>Total</b>	<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>
<b>TOTAL</b>		<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
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Exceeds Thresholds?	No	No	No	No
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### P4 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Fugitive Dust			2.2709	1.0981
	Off-Road	2.2462	4.801	0.0626	0.0626
	<b>Total</b>	<b>2.2462</b>	<b>4.801</b>	<b>2.3334</b>	<b>1.1606</b>
<b>TOTAL</b>		<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>

Onsite	<b>2042</b>				
	Fugitive Dust			2.2709	1.0981
	Off-Road	2.2462	4.801	0.0626	0.0626
	<b>Total</b>	<b>2.2462</b>	<b>4.801</b>	<b>2.3334</b>	<b>1.1606</b>
<b>TOTAL</b>		<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>

Onsite	<b>2042</b>				
	Fugitive Dust	0.00	0.00	2.27	1.10
	Off-Road	2.25	4.80	0.06	0.06
	<b>Total</b>	<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>
<b>TOTAL</b>		<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P4 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Off-Road	2.7853	7.1504	0.0355	0.0355
	<b>Total</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0355</b>	<b>0.0355</b>
<b>TOTAL</b>		<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2042</b>				
	Off-Road	2.7853	7.1504	0.0355	0.0355
	<b>Total</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0355</b>	<b>0.0355</b>
<b>TOTAL</b>		<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2042</b>				
	Off-Road	2.79	7.15	0.04	0.04
	<b>Total</b>	<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>
<b>TOTAL</b>		<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P4 Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				

	Off-Road	3.1337	7.4736	0.0844	0.0844
	Paving			0	0
	Total	<b>3.1337</b>	<b>7.4736</b>	<b>0.0844</b>	<b>0.0844</b>
<b>TOTAL</b>		<b>3.13</b>	<b>7.47</b>	<b>0.08</b>	<b>0.08</b>

Onsite		<b>2042</b>			
	Off-Road	3.1337	7.4736	0.0844	0.0844
	Paving			0	0
	Total	<b>3.1337</b>	<b>7.4736</b>	<b>0.0844</b>	<b>0.0844</b>
<b>TOTAL</b>		<b>3.13</b>	<b>7.47</b>	<b>0.08</b>	<b>0.08</b>

Onsite		<b>2042</b>			
	Off-Road	3.13	7.47	0.08	0.08
	Paving	0.00	0.00	0.00	0.00
	Total	<b>3.13</b>	<b>7.47</b>	<b>0.08</b>	<b>0.08</b>
<b>TOTAL</b>		<b>3.13</b>	<b>7.47</b>	<b>0.08</b>	<b>0.08</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

**P4 Architectural Coating**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2042</b>			
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	<b>0.727</b>	<b>1.7923</b>	<b>7.43E-03</b>	<b>7.43E-03</b>
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite		<b>2042</b>			
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	<b>0.727</b>	<b>1.7923</b>	<b>7.43E-03</b>	<b>7.43E-03</b>
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite		<b>2042</b>			
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	0.73	1.79	0.01	0.01
	Total	<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 4 All Activities Overlap</b>	<b>13.40</b>	<b>32.50</b>	<b>3.97</b>	<b>1.56</b>
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<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>P5 Demolition</b>						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2049</b>				
	Fugitive Dust				1.6759	0.2538
	Off-Road		5.3064	18.5788	0.1629	0.1629
	<b>Total</b>		<b>5.3064</b>	<b>18.5788</b>	<b>1.8388</b>	<b>0.4166</b>
<b>TOTAL</b>			<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
Onsite		<b>2049</b>				
	Fugitive Dust				1.6759	0.2538
	Off-Road		5.3064	18.5788	0.1629	0.1629
	<b>Total</b>		<b>5.3064</b>	<b>18.5788</b>	<b>1.8388</b>	<b>0.4166</b>
<b>TOTAL</b>			<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
Onsite		<b>2049</b>				
	Fugitive Dust		0.00	0.00	1.68	0.25
	Off-Road		5.31	18.58	0.16	0.16
	<b>Total</b>		<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
<b>TOTAL</b>			<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
<b>2.50-Acre Screening-Level LSTs<sup>4</sup></b>			<b>187</b>	<b>1,392</b>	<b>7.66</b>	<b>5.67</b>
Exceeds Thresholds?			No	No	No	No

<b>P5 Site Preparation</b>						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2049</b>				
	Fugitive Dust				8.4034	4.3188
	Off-Road		7.9943	15.7797	0.2026	0.2026
	<b>Total</b>		<b>7.9943</b>	<b>15.7797</b>	<b>8.6059</b>	<b>4.5214</b>
<b>TOTAL</b>			<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
Onsite		<b>2049</b>				
	Fugitive Dust				8.4034	4.3188
	Off-Road		7.9943	15.7797	0.2026	0.2026
	<b>Total</b>		<b>7.9943</b>	<b>15.7797</b>	<b>8.6059</b>	<b>4.5214</b>
<b>TOTAL</b>			<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
Onsite		<b>2049</b>				
	Fugitive Dust		0.00	0.00	8.40	4.32
	Off-Road		7.99	15.78	0.20	0.20
	<b>Total</b>		<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
<b>TOTAL</b>			<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
<b>3.50-Acre Screening-Level LSTs<sup>4</sup></b>			<b>220</b>	<b>1,712</b>	<b>10.99</b>	<b>7.00</b>
Exceeds Thresholds?			No	No	No	No

<b>P5 Grading</b>						
			NOx	CO	PM10 Total	PM2.5 Total

Onsite		<b>2049</b>			
	Fugitive Dust			3.9345	1.562
	Off-Road	7.3885	22.3122	0.225	0.225
	Total	<b>7.3885</b>	<b>22.3122</b>	<b>4.1596</b>	<b>1.787</b>
<b>TOTAL</b>		<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>

Onsite		<b>2049</b>			
	Fugitive Dust			3.9345	1.562
	Off-Road	7.3885	22.3122	0.225	0.225
	Total	<b>7.3885</b>	<b>22.3122</b>	<b>4.1596</b>	<b>1.787</b>
<b>TOTAL</b>		<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>

Onsite		<b>2049</b>			
	Fugitive Dust	0.00	0.00	3.93	1.56
	Off-Road	7.39	22.31	0.23	0.23
	Total	<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>
<b>TOTAL</b>		<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>

<b>4.00-Acre Screening-Level LSTs<sup>4</sup></b>		<b>237</b>	<b>1,872</b>	<b>12.66</b>	<b>7.67</b>
Exceeds Thresholds?		No	No	No	No

### P5 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2049</b>			
	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	<b>6.8903</b>	<b>16.1185</b>	<b>0.0737</b>	<b>0.0737</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

Onsite		<b>2049</b>			
	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	<b>6.8903</b>	<b>16.1185</b>	<b>0.0737</b>	<b>0.0737</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

Onsite		<b>2049</b>			
	Off-Road	6.89	16.12	0.07	0.07
	Total	<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

<b>1.31-Acre Screening-Level LSTs</b>		<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?		No	No	No	No

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2050</b>			
	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	<b>6.8903</b>	<b>16.1185</b>	<b>0.0737</b>	<b>0.0737</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

Onsite		<b>2050</b>			
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	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	6.8903	16.1185	0.0737	0.0737
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>
Onsite	<b>2050</b>				
	Off-Road	6.89	16.12	0.07	0.07
	Total	6.89	16.12	0.07	0.07
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>
<b>1.31-Acre Screening-Level LSTs</b>		<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?		No	No	No	No

### P5 Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2050</b>				
	Off-Road	3.6566	15.8177	0.1164	0.1164
	Paving			0	0
	Total	3.6566	15.8177	0.1164	0.1164
<b>TOTAL</b>		<b>3.66</b>	<b>15.82</b>	<b>0.12</b>	<b>0.12</b>
Onsite	<b>2050</b>				
	Off-Road	3.6566	15.8177	0.1164	0.1164
	Paving			0	0
	Total	3.6566	15.8177	0.1164	0.1164
<b>TOTAL</b>		<b>3.66</b>	<b>15.82</b>	<b>0.12</b>	<b>0.12</b>
Onsite	<b>2050</b>				
	Off-Road	3.66	15.82	0.12	0.12
	Paving	0.00	0.00	0.00	0.00
	Total	3.66	15.82	0.12	0.12
<b>TOTAL</b>		<b>3.66</b>	<b>15.82</b>	<b>0.12</b>	<b>0.12</b>
<b>≤1.00-Acre Screening-Level LSTs</b>		<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?		No	No	No	No

### P5 Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2050</b>				
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	0.727	1.7923	7.43E-03	7.43E-03
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>
Onsite	<b>2050</b>				
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	0.727	1.7923	7.43E-03	7.43E-03
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite		<b>2050</b>				
	Archit. Coating		0.00	0.00	0.00	0.00
	Off-Road		0.73	1.79	0.01	0.01
	Total		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>
<b>TOTAL</b>			<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

<b>≤1.00-Acre Screening-Level LSTs</b>		<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?		No	No	No	No

<b>Phase 5 All Activities Overlap</b>	<b>31.96</b>	<b>90.40</b>	<b>14.80</b>	<b>6.92</b>
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<b>5.00-Acre Screening-Level LSTs<sup>4</sup></b>		<b>270</b>	<b>2,193</b>	<b>15.99</b>	<b>9.00</b>
Exceeds Thresholds?		No	No	No	No

# Localized Construction Emissions Worksheet - Mitigated

\*CalEEMod, Version 2020.4.0

## P1 Demolition

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2026</b>				
	Fugitive Dust			1.3503	0.2044
	Off-Road	19.1966	19.4184	0.8528	0.792
	<b>Total</b>	<b>19.1966</b>	<b>19.4184</b>	<b>2.203</b>	<b>0.9964</b>
<b>TOTAL</b>		<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>

Onsite	<b>2026</b>				
	Fugitive Dust			1.3503	0.2044
	Off-Road	19.1966	19.4184	0.8528	0.792
	<b>Total</b>	<b>19.1966</b>	<b>19.4184</b>	<b>2.203</b>	<b>0.9964</b>
<b>TOTAL</b>		<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>

Onsite	<b>2026</b>				
	Fugitive Dust	0.00	0.00	1.35	0.20
	Off-Road	19.20	19.42	0.85	0.79
	<b>Total</b>	<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>
<b>TOTAL</b>		<b>19.20</b>	<b>19.42</b>	<b>2.20</b>	<b>1.00</b>

<b>≤1.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?	No	No	No	No

## Site Preparation

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2026</b>				
	Fugitive Dust			7.2829	3.743
	Off-Road	12.162	22.96	0.0621	0.0621
	<b>Total</b>	<b>12.162</b>	<b>22.96</b>	<b>7.345</b>	<b>3.805</b>
<b>TOTAL</b>		<b>12.16</b>	<b>22.96</b>	<b>7.35</b>	<b>3.81</b>

Onsite	<b>2026</b>				
	Fugitive Dust			7.2829	3.743
	Off-Road	12.162	22.96	0.0621	0.0621
	<b>Total</b>	<b>12.162</b>	<b>22.96</b>	<b>7.345</b>	<b>3.805</b>
<b>TOTAL</b>		<b>12.16</b>	<b>22.96</b>	<b>7.35</b>	<b>3.81</b>

Onsite	<b>2026</b>				
	Fugitive Dust	0.00	0.00	7.28	3.74
	Off-Road	12.16	22.96	0.06	0.06
	<b>Total</b>	<b>12.16</b>	<b>22.96</b>	<b>7.35</b>	<b>3.81</b>
<b>TOTAL</b>		<b>12.16</b>	<b>22.96</b>	<b>7.35</b>	<b>3.81</b>

<b>3.50-Acre Screening-Level LSTs<sup>4</sup></b>	<b>220</b>	<b>1,712</b>	<b>10.99</b>	<b>7.00</b>
Exceeds Thresholds?	No	No	No	No

### P1 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2026</b>				
	Fugitive Dust			3.4099	1.3537
	Off-Road	19.2707	36.7226	0.1015	0.1015
	<b>Total</b>	<b>19.2707</b>	<b>36.7226</b>	<b>3.5115</b>	<b>1.4553</b>
<b>TOTAL</b>		<b>19.27</b>	<b>36.72</b>	<b>3.51</b>	<b>1.46</b>
Onsite	<b>2026</b>				
	Fugitive Dust			3.4099	1.3537
	Off-Road	19.2707	36.7226	0.1015	0.1015
	<b>Total</b>	<b>19.2707</b>	<b>36.7226</b>	<b>3.5115</b>	<b>1.4553</b>
<b>TOTAL</b>		<b>19.27</b>	<b>36.72</b>	<b>3.51</b>	<b>1.46</b>
Onsite	<b>2026</b>				
	Fugitive Dust	0.00	0.00	3.41	1.35
	Off-Road	19.27	36.72	0.10	0.10
	<b>Total</b>	<b>19.27</b>	<b>36.72</b>	<b>3.51</b>	<b>1.46</b>
<b>TOTAL</b>		<b>19.27</b>	<b>36.72</b>	<b>3.51</b>	<b>1.46</b>
<b>4.00-Acre Screening-Level LSTs<sup>4</sup></b>		<b>237</b>	<b>1,872</b>	<b>12.66</b>	<b>7.67</b>
Exceeds Thresholds?		No	No	No	No

### P1 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2026</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	<b>Total</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.5276</b>	<b>0.4963</b>
<b>TOTAL</b>		<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
Onsite	<b>2026</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	<b>Total</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.5276</b>	<b>0.4963</b>
<b>TOTAL</b>		<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
Onsite	<b>2026</b>				
	Off-Road	12.47	16.08	0.53	0.50
	<b>Total</b>	<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
<b>TOTAL</b>		<b>12.47</b>	<b>16.08</b>	<b>0.53</b>	<b>0.50</b>
<b>1.31-Acre Screening-Level LSTs<sup>4</sup></b>		<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?		No	No	No	No

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2027</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	<b>Total</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.5276</b>	<b>0.4963</b>

**TOTAL** **12.47** **16.08** **0.53** **0.50**

Onsite	<b>2027</b>				
	Off-Road	12.4697	16.0847	0.5276	0.4963
	Total	12.4697	16.0847	0.5276	0.4963

**TOTAL** **12.47** **16.08** **0.53** **0.50**

Onsite	<b>2027</b>				
	Off-Road	12.47	16.08	0.53	0.50
	Total	12.47	16.08	0.53	0.50

**TOTAL** **12.47** **16.08** **0.53** **0.50**

<b>1.31-Acre Screening-Level LSTs<sup>4</sup></b>	<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?	No	No	No	No

**P1 Paving**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2027</b>				
	Off-Road	8.5816	14.578	0.4185	0.385
	Paving			0	0
	Total	8.5816	14.578	0.4185	0.385

**TOTAL** **8.58** **14.58** **0.42** **0.39**

Onsite	<b>2027</b>				
	Off-Road	8.5816	14.578	0.4185	0.385
	Paving			0	0
	Total	8.5816	14.578	0.4185	0.385

**TOTAL** **8.58** **14.58** **0.42** **0.39**

Onsite	<b>2027</b>				
	Off-Road	8.58	14.58	0.42	0.39
	Paving	0.00	0.00	0.00	0.00
	Total	8.58	14.58	0.42	0.39

**TOTAL** **8.58** **14.58** **0.42** **0.39**

<b>≤1.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?	No	No	No	No

**P1 Architectural Coating**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2027</b>				
	Archit. Coating			0	0
	Off-Road	1.1455	1.8091	0.0515	0.0515
	Total	1.1455	1.8091	0.0515	0.0515

**TOTAL** **1.15** **1.81** **0.05** **0.05**

Onsite	<b>2027</b>				
	Archit. Coating			0	0

	Off-Road	1.1455	1.8091	0.0515	0.0515
	Total	<b>1.1455</b>	<b>1.8091</b>	<b>0.0515</b>	<b>0.0515</b>
<b>TOTAL</b>		<b>1.15</b>	<b>1.81</b>	<b>0.05</b>	<b>0.05</b>

Onsite	<b>2027</b>				
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	1.15	1.81	0.05	0.05
	Total	<b>1.15</b>	<b>1.81</b>	<b>0.05</b>	<b>0.05</b>
<b>TOTAL</b>		<b>1.15</b>	<b>1.81</b>	<b>0.05</b>	<b>0.05</b>

<b>≤1.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 1 All Activities Overlap</b>	<b>72.83</b>	<b>111.57</b>	<b>14.06</b>	<b>7.19</b>
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<b>5.00-Acre Screening-Level LSTs<sup>4</sup></b>	<b>270</b>	<b>2,193</b>	<b>15.99</b>	<b>9.00</b>
Exceeds Thresholds?	No	No	No	No

### P2 Demolition

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2030</b>				
	Fugitive Dust			1.6974	0.257
	Off-Road	8.0078	12.9685	0.2148	0.2148
	Total	<b>8.0078</b>	<b>12.9685</b>	<b>1.9122</b>	<b>0.4718</b>
<b>TOTAL</b>		<b>8.01</b>	<b>12.97</b>	<b>1.91</b>	<b>0.47</b>

Onsite	<b>2030</b>				
	Fugitive Dust			1.6974	0.257
	Off-Road	8.0078	12.9685	0.2148	0.2148
	Total	<b>8.0078</b>	<b>12.9685</b>	<b>1.9122</b>	<b>0.4718</b>
<b>TOTAL</b>		<b>8.01</b>	<b>12.97</b>	<b>1.91</b>	<b>0.47</b>

Onsite	<b>2030</b>				
	Fugitive Dust	0.00	0.00	1.70	0.26
	Off-Road	8.01	12.97	0.21	0.21
	Total	<b>8.01</b>	<b>12.97</b>	<b>1.91</b>	<b>0.47</b>
<b>TOTAL</b>		<b>8.01</b>	<b>12.97</b>	<b>1.91</b>	<b>0.47</b>

<b>1.23-Acre Screening-Level LSTs<sup>4</sup></b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P2 Site Preparation

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2030</b>				
	Fugitive Dust			2.6788	1.2843
	Off-Road	4.7401	5.9133	0.1567	0.1567
	Total	<b>4.7401</b>	<b>5.9133</b>	<b>2.8355</b>	<b>1.4409</b>
<b>TOTAL</b>		<b>4.74</b>	<b>5.91</b>	<b>2.84</b>	<b>1.44</b>

Onsite		<b>2030</b>			
	Fugitive Dust			2.6788	1.2843
	Off-Road	4.7401	5.9133	0.1567	0.1567
	Total	4.7401	5.9133	2.8355	1.4409
<b>TOTAL</b>		<b>4.74</b>	<b>5.91</b>	<b>2.84</b>	<b>1.44</b>

Onsite		<b>2030</b>			
	Fugitive Dust	0.00	0.00	2.68	1.28
	Off-Road	4.74	5.91	0.16	0.16
	Total	4.74	5.91	2.84	1.44
<b>TOTAL</b>		<b>4.74</b>	<b>5.91</b>	<b>2.84</b>	<b>1.44</b>

<b>1.23-Acre Screening-Level LSTs</b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P2 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2030</b>			
	Fugitive Dust			3.0278	1.4641
	Off-Road	5.9092	7.9601	0.1859	0.1859
	Total	5.9092	7.9601	3.2137	1.65
<b>TOTAL</b>		<b>5.91</b>	<b>7.96</b>	<b>3.21</b>	<b>1.65</b>

Onsite		<b>2030</b>			
	Fugitive Dust			3.0278	1.4641
	Off-Road	5.9092	7.9601	0.1859	0.1859
	Total	5.9092	7.9601	3.2137	1.65
<b>TOTAL</b>		<b>5.91</b>	<b>7.96</b>	<b>3.21</b>	<b>1.65</b>

Onsite		<b>2030</b>			
	Fugitive Dust	0.00	0.00	3.03	1.46
	Off-Road	5.91	7.96	0.19	0.19
	Total	5.91	7.96	3.21	1.65
<b>TOTAL</b>		<b>5.91</b>	<b>7.96</b>	<b>3.21</b>	<b>1.65</b>

<b>1.23-Acre Screening-Level LSTs</b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P2 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2030</b>			
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	7.1882	12.1101	0.127	0.127
<b>TOTAL</b>		<b>7.19</b>	<b>12.11</b>	<b>0.13</b>	<b>0.13</b>

Onsite		<b>2030</b>			
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	7.1882	12.1101	0.127	0.127

**TOTAL** **7.19** **12.11** **0.13** **0.13**

Onsite **2030**  
 Off-Road 7.19 12.11 0.13 0.13  
 Total **7.19** **12.11** **0.13** **0.13**

**TOTAL** **7.19** **12.11** **0.13** **0.13**

**≤1.00-Acre Screening-Level LSTs** **118** **863** **11.36** **5.41**  
 Exceeds Thresholds? No No No No

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	7.1882	12.1101	0.127	0.127
<b>TOTAL</b>		<b>7.19</b>	<b>12.11</b>	<b>0.13</b>	<b>0.13</b>

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	7.1882	12.1101	0.127	0.127
	Total	7.1882	12.1101	0.127	0.127
<b>TOTAL</b>		<b>7.19</b>	<b>12.11</b>	<b>0.13</b>	<b>0.13</b>

Onsite **2031**  
 Off-Road 7.19 12.11 0.13 0.13  
 Total **7.19** **12.11** **0.13** **0.13**

**TOTAL** **7.19** **12.11** **0.13** **0.13**

**≤1.00-Acre Screening-Level LSTs** **118** **863** **11.36** **5.41**  
 Exceeds Thresholds? No No No No

**P2 Paving**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	4.3905	9.4567	0.1728	0.1728
	Paving			0	0
	Total	4.3905	9.4567	0.1728	0.1728
<b>TOTAL</b>		<b>4.39</b>	<b>9.46</b>	<b>0.17</b>	<b>0.17</b>

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Off-Road	4.3905	9.4567	0.1728	0.1728
	Paving			0	0
	Total	4.3905	9.4567	0.1728	0.1728
<b>TOTAL</b>		<b>4.39</b>	<b>9.46</b>	<b>0.17</b>	<b>0.17</b>

Onsite **2031**  
 Off-Road 4.39 9.46 0.17 0.17  
 Paving 0.00 0.00 0.00 0.00  
 Total **4.39** **9.46** **0.17** **0.17**

**TOTAL** **4.39** **9.46** **0.17** **0.17**



<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P2 Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2031</b>				
	Archit. Coating			0	0
	Off-Road	0.8563	1.7977	0.0203	0.0203
	Total	<b>0.8563</b>	<b>1.7977</b>	<b>0.0203</b>	<b>0.0203</b>
<b>TOTAL</b>		<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>

Onsite	<b>2031</b>				
	Archit. Coating			0	0
	Off-Road	0.8563	1.7977	0.0203	0.0203
	Total	<b>0.8563</b>	<b>1.7977</b>	<b>0.0203</b>	<b>0.0203</b>
<b>TOTAL</b>		<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>

Onsite	<b>2031</b>				
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	0.86	1.80	0.02	0.02
	Total	<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>
<b>TOTAL</b>		<b>0.86</b>	<b>1.80</b>	<b>0.02</b>	<b>0.02</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 2 All Activities Overlap</b>	<b>31.09</b>	<b>50.21</b>	<b>8.28</b>	<b>3.88</b>
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<b>1.23-Acre Screening-Level LSTs<sup>4</sup></b>	<b>130</b>	<b>946</b>	<b>12.22</b>	<b>5.80</b>
Exceeds Thresholds?	No	No	No	No

### P3 Site Preparation

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Fugitive Dust			2.27E-01	2.45E-02
	Off-Road	1.57E+00	3.88E+00	3.43E-02	3.43E-02
	Total	<b>1.57E+00</b>	<b>3.88E+00</b>	<b>2.61E-01</b>	<b>5.88E-02</b>
<b>TOTAL</b>		<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>

Onsite	<b>2038</b>				
	Fugitive Dust			0.2267	0.0245
	Off-Road	1.574	3.8815	0.0343	0.0343
	Total	<b>1.574</b>	<b>3.8815</b>	<b>0.261</b>	<b>0.0588</b>
<b>TOTAL</b>		<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>

Onsite	<b>2038</b>				
	Fugitive Dust	0.00	0.00	0.23	0.02

	Off-Road	1.57	3.88	0.03	0.03
	Total	<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>
<b>TOTAL</b>		<b>1.57</b>	<b>3.88</b>	<b>0.26</b>	<b>0.06</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P3 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Fugitive Dust			2.27E+00	1.10E+00
	Off-Road	2.87E+00	4.85E+00	8.74E-02	8.74E-02
	Total	<b>2.87E+00</b>	<b>4.85E+00</b>	<b>2.36E+00</b>	<b>1.19E+00</b>
<b>TOTAL</b>		<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>

Onsite	<b>2038</b>				
	Fugitive Dust			2.2709	1.0981
	Off-Road	2.873	4.8534	0.0874	0.0874
	Total	<b>2.873</b>	<b>4.8534</b>	<b>2.3583</b>	<b>1.1855</b>
<b>TOTAL</b>		<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>

Onsite	<b>2038</b>				
	Fugitive Dust	0.00	0.00	2.27	1.10
	Off-Road	2.87	4.85	0.09	0.09
	Total	<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>
<b>TOTAL</b>		<b>2.87</b>	<b>4.85</b>	<b>2.36</b>	<b>1.19</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P3 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Off-Road	2.9031	7.1465	4.23E-02	4.23E-02
	Total	<b>2.9031</b>	<b>7.1465</b>	<b>4.23E-02</b>	<b>4.23E-02</b>
<b>TOTAL</b>		<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2038</b>				
	Off-Road	2.9031	7.1465	0.0423	0.0423
	Total	<b>2.9031</b>	<b>7.1465</b>	<b>0.0423</b>	<b>0.0423</b>
<b>TOTAL</b>		<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2038</b>				
	Off-Road	2.90	7.15	0.04	0.04
	Total	<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>
<b>TOTAL</b>		<b>2.90</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
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Exceeds Thresholds?	No	No	No	No
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### P3 Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Off-Road	3.4702	7.4752	0.1067	0.1067
	Paving			0	0
	Total	<b>3.4702</b>	<b>7.4752</b>	<b>0.1067</b>	<b>0.1067</b>
<b>TOTAL</b>		<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>

Onsite	<b>2038</b>				
	Off-Road	3.4702	7.4752	0.1067	0.1067
	Paving			0	0
	Total	<b>3.4702</b>	<b>7.4752</b>	<b>0.1067</b>	<b>0.1067</b>
<b>TOTAL</b>		<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>

Onsite	<b>2038</b>				
	Off-Road	3.47	7.48	0.11	0.11
	Paving	0.00	0.00	0.00	0.00
	Total	<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>
<b>TOTAL</b>		<b>3.47</b>	<b>7.48</b>	<b>0.11</b>	<b>0.11</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P3 Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2038</b>				
	Archit. Coating			0	0
	Off-Road	0.7577	1.7943	9.90E-03	9.90E-03
	Total	<b>0.7577</b>	<b>1.7943</b>	<b>9.90E-03</b>	<b>9.90E-03</b>
<b>TOTAL</b>		<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite	<b>2038</b>				
	Archit. Coating			0	0
	Off-Road	0.7577	1.7943	9.90E-03	9.90E-03
	Total	<b>0.7577</b>	<b>1.7943</b>	<b>9.90E-03</b>	<b>9.90E-03</b>
<b>TOTAL</b>		<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite	<b>2038</b>				
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	0.76	1.79	0.01	0.01
	Total	<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>
<b>TOTAL</b>		<b>0.76</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 3 All Activities Overlap</b>	<b>11.58</b>	<b>25.15</b>	<b>2.78</b>	<b>1.40</b>
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<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

**P4 Demolition**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Fugitive Dust			1.2149	0.1839
	Off-Road	3.0819	7.4089	0.0355	0.0355
	<b>Total</b>	<b>3.0819</b>	<b>7.4089</b>	<b>1.2504</b>	<b>0.2194</b>
<b>TOTAL</b>		<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>

Onsite	<b>2042</b>				
	Fugitive Dust			1.2149	0.1839
	Off-Road	3.0819	7.4089	0.0355	0.0355
	<b>Total</b>	<b>3.0819</b>	<b>7.4089</b>	<b>1.2504</b>	<b>0.2194</b>
<b>TOTAL</b>		<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>

Onsite	<b>2042</b>				
	Fugitive Dust	0.00	0.00	1.21	0.18
	Off-Road	3.08	7.41	0.04	0.04
	<b>Total</b>	<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>
<b>TOTAL</b>		<b>3.08</b>	<b>7.41</b>	<b>1.25</b>	<b>0.22</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

**P4 Site Preparation**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Fugitive Dust			0.2267	0.0245
	Off-Road	1.4268	3.876	0.0277	0.0277
	<b>Total</b>	<b>1.4268</b>	<b>3.876</b>	<b>0.2544</b>	<b>0.0522</b>
<b>TOTAL</b>		<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>

Onsite	<b>2042</b>				
	Fugitive Dust			0.2267	0.0245
	Off-Road	1.4268	3.876	0.0277	0.0277
	<b>Total</b>	<b>1.4268</b>	<b>3.876</b>	<b>0.2544</b>	<b>0.0522</b>
<b>TOTAL</b>		<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>

Onsite	<b>2042</b>				
	Fugitive Dust	0.00	0.00	0.23	0.02
	Off-Road	1.43	3.88	0.03	0.03
	<b>Total</b>	<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>
<b>TOTAL</b>		<b>1.43</b>	<b>3.88</b>	<b>0.25</b>	<b>0.05</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
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Exceeds Thresholds?	No	No	No	No
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### P4 Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Fugitive Dust			2.2709	1.0981
	Off-Road	2.2462	4.801	0.0626	0.0626
	<b>Total</b>	<b>2.2462</b>	<b>4.801</b>	<b>2.3334</b>	<b>1.1606</b>
<b>TOTAL</b>		<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>

Onsite	<b>2042</b>				
	Fugitive Dust			2.2709	1.0981
	Off-Road	2.2462	4.801	0.0626	0.0626
	<b>Total</b>	<b>2.2462</b>	<b>4.801</b>	<b>2.3334</b>	<b>1.1606</b>
<b>TOTAL</b>		<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>

Onsite	<b>2042</b>				
	Fugitive Dust	0.00	0.00	2.27	1.10
	Off-Road	2.25	4.80	0.06	0.06
	<b>Total</b>	<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>
<b>TOTAL</b>		<b>2.25</b>	<b>4.80</b>	<b>2.33</b>	<b>1.16</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P4 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				
	Off-Road	2.7853	7.1504	0.0355	0.0355
	<b>Total</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0355</b>	<b>0.0355</b>
<b>TOTAL</b>		<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2042</b>				
	Off-Road	2.7853	7.1504	0.0355	0.0355
	<b>Total</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0355</b>	<b>0.0355</b>
<b>TOTAL</b>		<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

Onsite	<b>2042</b>				
	Off-Road	2.79	7.15	0.04	0.04
	<b>Total</b>	<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>
<b>TOTAL</b>		<b>2.79</b>	<b>7.15</b>	<b>0.04</b>	<b>0.04</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

### P4 Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2042</b>				

	Off-Road	3.1337	7.4736	0.0844	0.0844
	Paving			0	0
	Total	3.1337	7.4736	0.0844	0.0844
<b>TOTAL</b>		<b>3.13</b>	<b>7.47</b>	<b>0.08</b>	<b>0.08</b>

Onsite		<b>2042</b>			
	Off-Road	3.1337	7.4736	0.0844	0.0844
	Paving			0	0
	Total	3.1337	7.4736	0.0844	0.0844
<b>TOTAL</b>		<b>3.13</b>	<b>7.47</b>	<b>0.08</b>	<b>0.08</b>

Onsite		<b>2042</b>			
	Off-Road	3.13	7.47	0.08	0.08
	Paving	0.00	0.00	0.00	0.00
	Total	3.13	7.47	0.08	0.08
<b>TOTAL</b>		<b>3.13</b>	<b>7.47</b>	<b>0.08</b>	<b>0.08</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

**P4 Architectural Coating**

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2042</b>			
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	0.727	1.7923	7.43E-03	7.43E-03
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite		<b>2042</b>			
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	0.727	1.7923	7.43E-03	7.43E-03
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite		<b>2042</b>			
	Archit. Coating	0.00	0.00	0.00	0.00
	Off-Road	0.73	1.79	0.01	0.01
	Total	0.73	1.79	0.01	0.01
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>Phase 4 All Activities Overlap</b>	<b>13.40</b>	<b>32.50</b>	<b>3.97</b>	<b>1.56</b>
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<b>≤1.00-Acre Screening-Level LSTs</b>	<b>118</b>	<b>863</b>	<b>11.36</b>	<b>5.41</b>
Exceeds Thresholds?	No	No	No	No

<b>P5 Demolition</b>						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2049</b>				
	Fugitive Dust				1.6759	0.2538
	Off-Road		5.3064	18.5788	0.1629	0.1629
	Total		<b>5.3064</b>	<b>18.5788</b>	<b>1.8388</b>	<b>0.4166</b>
<b>TOTAL</b>			<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
Onsite		<b>2049</b>				
	Fugitive Dust				1.6759	0.2538
	Off-Road		5.3064	18.5788	0.1629	0.1629
	Total		<b>5.3064</b>	<b>18.5788</b>	<b>1.8388</b>	<b>0.4166</b>
<b>TOTAL</b>			<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
Onsite		<b>2049</b>				
	Fugitive Dust		0.00	0.00	1.68	0.25
	Off-Road		5.31	18.58	0.16	0.16
	Total		<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
<b>TOTAL</b>			<b>5.31</b>	<b>18.58</b>	<b>1.84</b>	<b>0.42</b>
<b>2.50-Acre Screening-Level LSTs<sup>4</sup></b>			<b>187</b>	<b>1,392</b>	<b>7.66</b>	<b>5.67</b>
Exceeds Thresholds?			No	No	No	No

<b>P5 Site Preparation</b>						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2049</b>				
	Fugitive Dust				8.4034	4.3188
	Off-Road		7.9943	15.7797	0.2026	0.2026
	Total		<b>7.9943</b>	<b>15.7797</b>	<b>8.6059</b>	<b>4.5214</b>
<b>TOTAL</b>			<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
Onsite		<b>2049</b>				
	Fugitive Dust				8.4034	4.3188
	Off-Road		7.9943	15.7797	0.2026	0.2026
	Total		<b>7.9943</b>	<b>15.7797</b>	<b>8.6059</b>	<b>4.5214</b>
<b>TOTAL</b>			<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
Onsite		<b>2049</b>				
	Fugitive Dust		0.00	0.00	8.40	4.32
	Off-Road		7.99	15.78	0.20	0.20
	Total		<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
<b>TOTAL</b>			<b>7.99</b>	<b>15.78</b>	<b>8.61</b>	<b>4.52</b>
<b>3.50-Acre Screening-Level LSTs<sup>4</sup></b>			<b>220</b>	<b>1,712</b>	<b>10.99</b>	<b>7.00</b>
Exceeds Thresholds?			No	No	No	No

<b>P5 Grading</b>						
			NOx	CO	PM10 Total	PM2.5 Total

Onsite		<b>2049</b>			
	Fugitive Dust			3.9345	1.562
	Off-Road	7.3885	22.3122	0.225	0.225
	Total	<b>7.3885</b>	<b>22.3122</b>	<b>4.1596</b>	<b>1.787</b>
<b>TOTAL</b>		<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>

Onsite		<b>2049</b>			
	Fugitive Dust			3.9345	1.562
	Off-Road	7.3885	22.3122	0.225	0.225
	Total	<b>7.3885</b>	<b>22.3122</b>	<b>4.1596</b>	<b>1.787</b>
<b>TOTAL</b>		<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>

Onsite		<b>2049</b>			
	Fugitive Dust	0.00	0.00	3.93	1.56
	Off-Road	7.39	22.31	0.23	0.23
	Total	<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>
<b>TOTAL</b>		<b>7.39</b>	<b>22.31</b>	<b>4.16</b>	<b>1.79</b>

<b>4.00-Acre Screening-Level LSTs<sup>4</sup></b>		<b>237</b>	<b>1,872</b>	<b>12.66</b>	<b>7.67</b>
Exceeds Thresholds?		No	No	No	No

### P5 Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2049</b>			
	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	<b>6.8903</b>	<b>16.1185</b>	<b>0.0737</b>	<b>0.0737</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

Onsite		<b>2049</b>			
	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	<b>6.8903</b>	<b>16.1185</b>	<b>0.0737</b>	<b>0.0737</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

Onsite		<b>2049</b>			
	Off-Road	6.89	16.12	0.07	0.07
	Total	<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

<b>1.31-Acre Screening-Level LSTs</b>		<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?		No	No	No	No

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		<b>2050</b>			
	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	<b>6.8903</b>	<b>16.1185</b>	<b>0.0737</b>	<b>0.0737</b>
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>

Onsite		<b>2050</b>			
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	Off-Road	6.8903	16.1185	0.0737	0.0737
	Total	6.8903	16.1185	0.0737	0.0737
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>
Onsite	<b>2050</b>				
	Off-Road	6.89	16.12	0.07	0.07
	Total	6.89	16.12	0.07	0.07
<b>TOTAL</b>		<b>6.89</b>	<b>16.12</b>	<b>0.07</b>	<b>0.07</b>
<b>1.31-Acre Screening-Level LSTs</b>		<b>134</b>	<b>978</b>	<b>5.31</b>	<b>4.31</b>
Exceeds Thresholds?		No	No	No	No

### P5 Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2050</b>				
	Off-Road	3.6566	15.8177	0.1164	0.1164
	Paving			0	0
	Total	3.6566	15.8177	0.1164	0.1164
<b>TOTAL</b>		<b>3.66</b>	<b>15.82</b>	<b>0.12</b>	<b>0.12</b>
Onsite	<b>2050</b>				
	Off-Road	3.6566	15.8177	0.1164	0.1164
	Paving			0	0
	Total	3.6566	15.8177	0.1164	0.1164
<b>TOTAL</b>		<b>3.66</b>	<b>15.82</b>	<b>0.12</b>	<b>0.12</b>
Onsite	<b>2050</b>				
	Off-Road	3.66	15.82	0.12	0.12
	Paving	0.00	0.00	0.00	0.00
	Total	3.66	15.82	0.12	0.12
<b>TOTAL</b>		<b>3.66</b>	<b>15.82</b>	<b>0.12</b>	<b>0.12</b>
<b>≤1.00-Acre Screening-Level LSTs</b>		<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?		No	No	No	No

### P5 Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	<b>2050</b>				
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	0.727	1.7923	7.43E-03	7.43E-03
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>
Onsite	<b>2050</b>				
	Archit. Coating			0	0
	Off-Road	0.727	1.7923	7.43E-03	7.43E-03
	Total	0.727	1.7923	7.43E-03	7.43E-03
<b>TOTAL</b>		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

Onsite		<b>2050</b>				
	Archit. Coating		0.00	0.00	0.00	0.00
	Off-Road		0.73	1.79	0.01	0.01
	Total		<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>
<b>TOTAL</b>			<b>0.73</b>	<b>1.79</b>	<b>0.01</b>	<b>0.01</b>

<b>≤1.00-Acre Screening-Level LSTs</b>		<b>118</b>	<b>863</b>	<b>5.00</b>	<b>4.00</b>
Exceeds Thresholds?		No	No	No	No

<b>Phase 5 All Activities Overlap</b>	<b>31.96</b>	<b>90.40</b>	<b>14.80</b>	<b>6.92</b>
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<b>5.00-Acre Screening-Level LSTs<sup>4</sup></b>		<b>270</b>	<b>2,193</b>	<b>15.99</b>	<b>9.00</b>
Exceeds Thresholds?		No	No	No	No

# Regional Operation Emissions Worksheet\*

\*CalEEMod, Version 2020.4.0

## Existing Baseline Year 2021

### Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	13.1521	5.50E-04	0.0603	0.00E+00	2.20E-04	2.20E-04
Energy	0.2918	2.6523	2.228	0.0159	0.2016	0.2016
Mobile	70.4144	63.8952	671.4847	1.2132	120.7798	32.6031
<b>Total</b>	<b>83.8582</b>	<b>66.5481</b>	<b>673.773</b>	<b>1.2291</b>	<b>120.9816</b>	<b>32.8049</b>

### Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	13.1521	5.50E-04	0.0603	0.00E+00	2.20E-04	2.20E-04
Energy	0.2918	2.6523	2.228	0.0159	0.2016	0.2016
Mobile	61.3647	67.9235	595.1865	1.1124	120.7799	32.6031
<b>Total</b>	<b>74.8085</b>	<b>70.5764</b>	<b>597.4748</b>	<b>1.1283</b>	<b>120.9817</b>	<b>32.8049</b>

### Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	13.152100	0.000550	0.060300	0.000000	0.000220	0.000220
Energy	0.291800	2.652300	2.228000	0.015900	0.201600	0.201600
Mobile	70.414400	67.923500	671.484700	1.213200	120.779900	32.603100
<b>Total</b>	<b>83.86</b>	<b>70.58</b>	<b>673.77</b>	<b>1.23</b>	<b>120.98</b>	<b>32.80</b>

## Existing Buildout Year 2050

### Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	13.1519	5.40E-04	0.0597	0.00E+00	2.10E-04	2.10E-04
Energy	0.2918	2.6523	2.228	0.0159	0.2016	0.2016
Mobile	33.9104	18.4903	357.8647	0.7883	120.1356	32.0547
<b>Total</b>	<b>47.3541</b>	<b>21.1432</b>	<b>360.1524</b>	<b>0.8042</b>	<b>120.3374</b>	<b>32.2565</b>

### Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	13.1519	5.40E-04	0.0597	0.00E+00	2.10E-04	2.10E-04
Energy	0.2918	2.6523	2.228	0.0159	0.2016	0.2016
Mobile	29.5007	20.0268	323.2506	0.7231	120.1356	32.0548
<b>Total</b>	<b>42.9443</b>	<b>22.6797</b>	<b>325.5383</b>	<b>0.739</b>	<b>120.3374</b>	<b>32.2565</b>

### Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	13.151900	0.000540	0.059700	0.000000	0.000210	0.000210
Energy	0.291800	2.652300	2.228000	0.015900	0.201600	0.201600
Mobile	33.910400	20.026800	357.864700	0.788300	120.135600	32.054800
<b>Total</b>	<b>47.35</b>	<b>22.68</b>	<b>360.15</b>	<b>0.80</b>	<b>120.34</b>	<b>32.26</b>

### Existing Remaining Buildout Year 2050

#### Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	8.0862	3.30E-04	0.0367	0.00E+00	1.30E-04	1.30E-04
Energy	0.1794	1.6307	1.3698	9.78E-03	0.1239	0.1239
Mobile	33.9105	18.4904	357.8653	0.7883	120.1358	32.0548
<b>Total</b>	<b>42.1761</b>	<b>20.1214</b>	<b>359.2718</b>	<b>0.7981</b>	<b>120.2598</b>	<b>32.1789</b>

#### Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	8.0862	3.30E-04	0.0367	0.00E+00	1.30E-04	1.30E-04
Energy	0.1794	1.6307	1.3698	9.78E-03	0.1239	0.1239
Mobile	29.5007	20.0268	323.2511	0.7231	120.1358	32.0548
<b>Total</b>	<b>37.7663</b>	<b>21.6579</b>	<b>324.6576</b>	<b>0.7329</b>	<b>120.2598</b>	<b>32.1789</b>

#### Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	8.086200	0.000330	0.036700	0.000000	0.000130	0.000130
Energy	0.179400	1.630700	1.369800	0.009780	0.123900	0.123900
Mobile	33.910500	20.026800	357.865300	0.788300	120.135800	32.054800
<b>Total</b>	<b>42.18</b>	<b>21.66</b>	<b>359.27</b>	<b>0.80</b>	<b>120.26</b>	<b>32.18</b>

#### Regional Thresholds

	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Thresholds?	No	No	No	No	No	No

### New Proposed Buildout Year 2050

#### Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	9.0854	8.60E-04	0.0962	1.00E-05	3.40E-04	3.40E-04
Energy	0.1604	1.4578	1.2246	8.75E-03	0.1108	0.1108
Mobile	1.9119	1.02	20.1743	0.0444	6.7711	1.8065
<b>Total</b>	<b>11.1576</b>	<b>2.4786</b>	<b>21.495</b>	<b>0.0531</b>	<b>6.8823</b>	<b>1.9176</b>

#### Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	9.0854	8.60E-04	0.0962	1.00E-05	3.40E-04	3.40E-04
Energy	0.1604	1.4578	1.2246	8.75E-03	0.1108	0.1108
Mobile	1.6632	1.1053	18.2218	0.0407	6.7711	1.8065
<b>Total</b>	<b>10.909</b>	<b>2.564</b>	<b>19.5425</b>	<b>0.0495</b>	<b>6.8823</b>	<b>1.9176</b>

#### Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	9.085400	0.000860	0.096200	0.000010	0.000340	0.000340
Energy	0.160400	1.457800	1.224600	0.008750	0.110800	0.110800
Mobile	1.911900	1.105300	20.174300	0.044400	6.771100	1.806500
<b>Total</b>	<b>11.16</b>	<b>2.56</b>	<b>21.50</b>	<b>0.05</b>	<b>6.88</b>	<b>1.92</b>

#### Regional Thresholds

	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Thresholds?	No	No	No	No	No	No

**Full Buildout Year 2050**

**Summer**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Area	17.1716	0.00119	0.1329	0.00001	0.00047	0.00047
Energy	0.3398	3.0885	2.5944	0.01853	0.2347	0.2347
Mobile	35.8224	19.5104	378.0396	0.8327	126.9069	33.8613
<b>Total</b>	<b>53.3338</b>	<b>22.60009</b>	<b>380.7669</b>	<b>0.85124</b>	<b>127.14207</b>	<b>34.09647</b>

**Winter**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Area	17.1716	0.00119	0.1329	0.00001	0.00047	0.00047
Energy	0.3398	3.0885	2.5944	0.01853	0.2347	0.2347
Mobile	31.1639	21.1321	341.4729	0.7638	126.9069	33.8613
<b>Total</b>	<b>48.6753</b>	<b>24.22179</b>	<b>344.2002</b>	<b>0.78234</b>	<b>127.14207</b>	<b>34.09647</b>

**Max Daily**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Area	17.171600	0.001190	0.132900	0.000010	0.000470	0.000470
Energy	0.339800	3.088500	2.594400	0.018530	0.234700	0.234700
Mobile	35.822400	21.132100	378.039600	0.832700	126.906900	33.861300
<b>Total</b>	<b>53.33</b>	<b>24.22</b>	<b>380.77</b>	<b>0.85124</b>	<b>127.14</b>	<b>34.10</b>

**Net Change Buildout Year 2050**

**Summer**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Area	4.0197	0.00065	0.0732	0.00001	0.00026	0.00026
Energy	0.048	0.4362	0.3664	0.00263	0.0331	0.0331
Mobile	1.912	1.0201	20.1749	0.0444	6.7713	1.8066
<b>Total</b>	<b>5.9797</b>	<b>1.45689</b>	<b>20.6145</b>	<b>0.04704</b>	<b>6.80467</b>	<b>1.83997</b>

**Winter**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Area	4.0197	0.00065	0.0732	0.00001	0.00026	0.00026
Energy	0.048	0.4362	0.3664	0.00263	0.0331	0.0331
Mobile	1.6632	1.1053	18.2223	0.0407	6.7713	1.8065
<b>Total</b>	<b>5.731</b>	<b>1.54209</b>	<b>18.6619</b>	<b>0.04334</b>	<b>6.80467</b>	<b>1.83997</b>

**Max Daily**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Area	4.019700	0.000650	0.073200	0.000010	0.000260	0.000260
Energy	0.048000	0.436200	0.366400	0.002630	0.033100	0.033100
Mobile	1.912000	1.105300	20.174900	0.044400	6.771300	1.806600
<b>Total</b>	<b>5.98</b>	<b>1.54</b>	<b>20.61</b>	<b>0.05</b>	<b>6.80</b>	<b>1.84</b>

**Regional Thresholds**

	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Thresholds?	No	No	No	No	No	No

**Construction and Operation Overlap Scenario**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Maximum Daily Operation (Net)	5.98	1.54	20.61	0.05	6.80	1.84
Construction Peak Emissions	204.01	35.91	94.49	0.25	16.98	7.54
<b>Combined</b>	<b>209.99</b>	<b>37.46</b>	<b>115.10</b>	<b>0.30</b>	<b>23.79</b>	<b>9.38</b>

## GHG Emissions Inventory

\*CalEEMod, Version 2020.4.0

### Existing - 2021

Source	Buildout MTCO <sub>2</sub> e/Year	Percent of Project Total
Area	0	0%
Energy	1,817	10%
Mobile	15,403	81%
Waste	1,512	8%
Water	271	1%
<b>Total All Sectors</b>	<b>19,003</b>	<b>100%</b>

### Proposed Project Buildout - 2050

Phase 1	1,172	MTCO <sub>2</sub> e
Phase 2	322	MTCO <sub>2</sub> e
Phase 3	79	MTCO <sub>2</sub> e
Phase 4	104	MTCO <sub>2</sub> e
Phase 5	719	MTCO <sub>2</sub> e
<b>Total Construction</b>	<b>2,396</b>	<b>MTCO<sub>2</sub>e</b>

### Proposed Project

#### Remaining Existing Land Uses

Source	Buildout MTons/Year	Percent of Project Total
Area	0	0%
Energy	1,117	8%
Mobile	11,095	79%
Waste	1,512	11%
Water	271	2%
<b>Total All Sectors</b>	<b>13,996</b>	<b>100%</b>

#### New Land Uses

Source	Buildout MTons/Year	Percent of Project Total
Area	0	0%
Energy	1,024	59%
Mobile	624	36%
Waste	85	5%
Water	13	1%
<b>Total All Sectors</b>	<b>1,747</b>	<b>100%</b>

#### Combined

Source	Buildout MTons/Year	Percent of Project Total
Area	0	0%
Energy	2,141	14%
Mobile	11,720	74%
Waste	1,598	10%
Water	284	2%
Amortized Construction Emissions*	80	1%
<b>Total All Sectors</b>	<b>15,822</b>	<b>100%</b>

\*Total construction emissions are amortized over 30 years per South Coast AQMD methodology; SCAQMD. 2010, September 28.  
 Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 15.  
<http://www.aqmd.gov/ceqa/handbook/GHG/2010/sept28mtg/sept29.html>.

## Net Difference

Source	Buildout MTons/Year	Percent Change
Area	0	122%
Energy	324	18%
Mobile	-3,683	-24%
Waste	85	6%
Water	13	5%
Amortized Construction Emissions	80	n/a
Total All Sectors	-3,181	-17%
South Coast AQMD Bright-Line Screening Threshold	3,000	
<b>Exceed Threshold?</b>	<b>No</b>	



## 2. Criteria Air Pollutant and GHG Modeling Inputs and Assumptions

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**CalEEMod Land Use Inputs: Existing**

**Name:** Rancho Cucamonga Campus  
**Project Location:** 5885 Haven Avenue, Rancho Cucamonga, CA 91737  
**County/Air Basin:** San Bernardino County (SC)  
**Climate Zone:** 10  
**Land Use Setting:** Urban  
**Operational Year:** 2021 & 2051  
**Utility Company:** SCE  
**Air Basin:** SoCAB  
**Air District:** South Coast AQMD

Total Project Site Area 200.00 acres  
 Acreage Disturbed                      acres

Land Use	Existing Land Use Square Feet
College	588,479

**CalEEMod Land Use Inputs**

Land Use	Land Use Type	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational	Junior College	588.479	1000BSF	200.00	588,479

**Trip Generation**

	Education	Warehouse	Total	Fleet Mix %
Daily Trips: <sup>1</sup>	18946	36	18,982	100%
<i>Passenger</i>	18946	26	18,972	99.95%
2- & 3-Axle Trucks	0	4	4	0.02%
4-Axle Trucks	0	6	6	0.03%
Days Per Week	5	5	5	
Weeks Per Year	52	52	52	
Annual Trips	4,925,960	9,360	4,935,320	
<i>Passenger</i>	4,925,960	6,760	4,932,720	
2- & 3-Axle Trucks	0	1,040	1,040	
4-Axle Trucks	0	1,560	1,560	

**Project Trips CalEEMod Inputs**

	Weekday	Saturday	Sunday
CalEEMod Default Trip Rate - Junior College	20.25	11.23	1.21
	Percent of Weekday	55%	6%
Passenger/Main Model Run			
Land Use	Adjusted Weekday Trip Generation Rate	Adjusted Saturday Trip Generation	Adjusted Sunday Trip Generation
Junior College	32.2560	17.8882	1.9274

<sup>1</sup> Urban Crossroads. 2021, September 10. Chaffey Community College District's Rancho Cucamonga Campus Master Plan

**Water Use\***

[Info](#)

	Number of Students	Indoor Water Generation Rate (gal/student/yr) <sup>1</sup>	Total Annual Indoor Water Demand (gal/yr)	Outdoor Water Generation Rate (gal/student/yr) <sup>1</sup>	Total Annual Outdoor Water Demand (gal/yr)
Junior College	16,474	2,141	35,270,834	3,349	55,171,426

<sup>1</sup> CalEEMod default.

**Solid Waste\***

	Number of Dwelling Units	Solid Waste Generation Rate (ton/student/yr) <sup>1</sup>	Total Annual Solid Waste Generation (tons/yr)
Junior College	16,474	0.1825	3,007

<sup>1</sup> CalEEMod default.

**Carbon Intensity Factors**

**Southern California Edison Carbon Intensity Factors**

SCE CO <sub>2</sub> e Intensity Factor <sup>1</sup>	512	pounds per megawatt hour
CO <sub>2</sub> : <sup>1,2</sup>	509.983	pounds per megawatt hour
CH <sub>4</sub> : <sup>3</sup>	0.033	pound per megawatt hour
N <sub>2</sub> O: <sup>3</sup>	0.004	pound per megawatt hour

<sup>1</sup> Based on CO<sub>2</sub>e intensity factor of 512 pounds per megawatt hour; Southern California Edison. 2020. 2020 Sustainability Report. <https://www.edison.com/content/dam/eix/documents/sustainability/eix-2020-sustainability-report.pdf>

<sup>2</sup> Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH<sub>4</sub> and N<sub>2</sub>O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

<sup>3</sup> CalEEMod default values.

**General Conversion Factors**

lbs to kg	0.4536
kg to MTons	0.001
Mmbtu to Therm	0.1
Therms to kwh	29.30711111
kilowatt hrs to megawatt hrs	0.001
lbs to Tons	2000
Tons to MTon	0.9071847

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1.  
Appendix F, Standard Conversion Factors

**Global Warming Potentials  
(GWP)**

CO <sub>2</sub>	1
CH <sub>4</sub>	25
N <sub>2</sub> O	298

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH<sub>4</sub> and N<sub>2</sub>O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

**Energy**

Utilizes CalEEMod default historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier*	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area (BSF)*	Total Paintable Exterior Surface Area (BSF)*
Educational	588,479	2.0	1,176,958	882,719	294,240

\*Based on CalEEMod methodology in calculating the paintable surface areas for a residential and nonresidential building and parking lots.

**CalEEMod Land Use Inputs: Existing Remaining**

Name: Rancho Cucamonga Campus  
 Project Location: 5885 Haven Avenue, Rancho Cucamonga, CA 91737  
 County/Air Basin: San Bernardino County (SC)  
 Climate Zone: 10  
 Land Use Setting: Urban  
 Operational Year: 2051  
 Utility Company: SCE  
 Air Basin: SoCAB  
 Air District: South Coast AQMD

Total Project Site Area 200.00 acres  
 Acreage Disturbed                      acres

Land Use	Existing Land Use Square Feet	Existing Demolished Land Use Square Feet	Existing Remaining Land Use Square Feet	Proposed New Land Use Square Feet	Total Land Use square feet	Renovation Land Use square feet
College	588,479	0				
Phase 1	588,479	37,462	551,017	105,600	656,617	9,780
Phase 2	551,017	80,669	470,348	106,759	682,707	14,738
Phase 3	470,348	0	470,348	13,200	695,907	17,395
Phase 4	470,348	28,879	441,469	63,500	730,528	59,223
Phase 5	441,469	79,654	361,815	107,388	758,262	4,546
<b>Total</b>	<b>n/a</b>	<b>226,664</b>	<b>361,815</b>	<b>396,447</b>	<b>758,262</b>	

**CalEEMod Land Use Inputs**

Land Use	Land Use Type	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational	Junior College	361.815	1000BSF	182.33	361,815

**Trip Generation**

	Education	Warehouse	Total	Fleet Mix %
Daily Trips: <sup>1</sup>	18946	36	18,982	100%
<i>Passenger</i>	18946	26	18,972	99.95%
<i>2- &amp; 3-Axle Trucks</i>	0	4	4	0.02%
<i>4-Axle Trucks</i>	0	6	6	0.03%
Days Per Week	5	5	5	
Weeks Per Year	52	52	52	
Annual Trips	4,925,960	9,360	4,935,320	
<i>Passenger</i>	4,925,960	6,760	4,932,720	
<i>2- &amp; 3-Axle Trucks</i>	0	1,040	1,040	
<i>4-Axle Trucks</i>	0	1,560	1,560	

**Project Trips CalEEMod Inputs**

	Weekday	Saturday	Sunday
CalEEMod Default Trip Rate - Junior College	20.25	11.23	1.21
	Percent of Weekday	55%	6%

Land Use	Trips Per Day	Passenger/Main Model Run		
		Adjusted Weekday Trip Generation Rate	Adjusted Saturday Trip Generation	Adjusted Sunday Trip Generation
<i>Junior College</i>	18,982	52.4633	29.0944	3.1348

<sup>1</sup> Urban Crossroads. 2021, September 10. Chaffey Community College District's Rancho Cucamonga Campus Master Plan

**Water Use\***

[Info](#)

	Number of Students	Indoor Water Generation Rate (gal/student/yr) <sup>1</sup>	Total Annual Indoor Water Demand (gal/yr)	Outdoor Water Generation Rate (gal/student/yr) <sup>1</sup>	Total Annual Outdoor Water Demand (gal/yr)
Junior College	16,474	2,141	35,270,834	3,349	55,171,426

<sup>1</sup> CalEEMod default.

**Solid Waste\***

	Number of Dwelling Units	Solid Waste Generation Rate (ton/student/yr) <sup>1</sup>	Total Annual Solid Waste Generation (tons/yr)
Junior College	16,474	0.1825	3,007

<sup>1</sup> CalEEMod default.

**Carbon Intensity Factors**

**Southern California Edison Carbon Intensity Factors**

SCE CO <sub>2</sub> e Intensity Factor <sup>1</sup>	512	pounds per megawatt hour
CO <sub>2</sub> : <sup>1,2</sup>	509.983	pounds per megawatt hour
CH <sub>4</sub> : <sup>3</sup>	0.033	pound per megawatt hour
N <sub>2</sub> O: <sup>3</sup>	0.004	pound per megawatt hour

<sup>1</sup> Based on CO<sub>2</sub>e intensity factor of 512 pounds per megawatt hour; Southern California Edison. 2020. 2020 Sustainability Report.

<https://www.edison.com/content/dam/eix/documents/sustainability/eix-2020-sustainability-report.pdf>

<sup>2</sup> Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH<sub>4</sub> and N<sub>2</sub>O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

<sup>3</sup> CalEEMod default values.

**General Conversion Factors**

lbs to kg	0.4536
kg to MTons	0.001
Mmbtu to Therm	0.1
Therms to kwh	29.30711111
kilowatt hrs to megawatt hrs	0.001
lbs to Tons	2000
Tons to MTon	0.9071847

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

**Global Warming Potentials  
(GWP)**

CO <sub>2</sub>	1
CH <sub>4</sub>	25
N <sub>2</sub> O	298

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH<sub>4</sub> and N<sub>2</sub>O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

**Energy**

Utilizes CalEEMod default historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier*	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area (BSF)*	Total Paintable Exterior Surface Area (BSF)*
Educational	361,815	2.0	723,630	542,723	180,908

\*Based on CalEEMod methodology in calculating the paintable surface areas for a residential and nonresidential building and parking lots.

## CalEEMod Land Use Inputs: New Proposed

**Name:** Rancho Cucamonga Campus  
**Project Location:** 5885 Haven Avenue, Rancho Cucamonga, CA 91737  
**County/Air Basin:** San Bernardino County (SC)  
**Climate Zone:** 10  
**Land Use Setting:** Urban  
**Operational Year:** 2051  
**Utility Company:** SCE  
**Air Basin:** SoCAB  
**Air District:** South Coast AQMD

Total Project Site Area 200.00 acres  
 Acreage Disturbed                      acres

Land Use	Existing Land Use Square Feet	Existing Demolished Land Use Square Feet	Existing Remaining Land Use Square Feet	Proposed New Land Use Square Feet	Total Land Use square feet	Renovation Land Use square feet
College	588,479	0				
Phase 1	588,479	37,462	551,017	105,600	656,617	9,780
Phase 2	551,017	80,669	470,348	106,759	682,707	14,738
Phase 3	470,348	0	470,348	13,200	695,907	17,395
Phase 4	470,348	28,879	441,469	63,500	730,528	59,223
Phase 5	441,469	79,654	361,815	107,388	758,262	4,546
<b>Total</b>	<b>n/a</b>	<b>226,664</b>	<b>361,815</b>	<b>396,447</b>	<b>758,262</b>	
<b>Other Use</b>						
Parking Lot	321,399	square feet				
Non-Parking Asphalt	230,673	square feet				

### CalEEMod Land Use Inputs (Passenger Vehicles and Truck Only Model Runs)

Land Use	Land Use Type	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational	Junior College	396.447	1000BSF	4.99	396,447
Parking Lot	Parking Lot	321.399	1000BSF	7.38	321,399
Parking Lot	Other Asphalt Surface	230.673	1000BSF	5.30	230,673

### Trip Generation

	Education	Total	Fleet Mix %		
Daily Trips: <sup>1</sup>	1,070	1,070	100%		
Passenger	1,070	1,070	100.00%		
2- & 3-Axle Trucks	0	0	0.00%		
4-Axle Trucks	0	0	0.00%		
Days Per Week	5	5			
Weeks Per Year	52	52			
Annual Trips	278,200	278,200	<b>Total Annual Trips</b>	<b>Average Daily Trips</b>	<b>Fleet Mix %</b>
Passenger	278,200	278,200	278,200	764	100%
2- & 3-Axle Trucks	0	0	0	0	0.00%
4-Axle Trucks	0	0	0	0	0.00%



**Project Trips CalEEMod Inputs**

	Weekday	Saturday	Sunday
CalEEMod Default Trip Rate - Junior College	20.25	11.23	1.21
	Percent of Weekday	55%	6%

Land Use	Passenger/Main Model Run			
	Trips Per Day	Adjusted Weekday Trip Generation Rate	Adjusted Saturday Trip Generation	Adjusted Sunday Trip Generation
Junior College	1,070	2.6990	1.4968	0.1613

<sup>1</sup> Urban Crossroads. 2021, September 10. Chaffey Community College District's Rancho Cucamonga Campus Master Plan

**Water Use\***

	Number of Students	Indoor Water Generation Rate (gal/student/yr) <sup>1</sup>	Total Annual Indoor Water Demand (gal/yr)	Outdoor Water Generation Rate (gal/student/yr) <sup>1</sup>	Total Annual Outdoor Water Demand (gal/yr)
Educational	930	2,141	1,991,130	3,349	3,114,570

<sup>1</sup> CalEEMod default.

**Solid Waste\***

	Number of Students	Solid Waste Generation Rate (ton/student/yr) <sup>1</sup>	Total Annual Solid Waste Generation (tons/yr)
Educational	930	0.1825	170

<sup>1</sup> CalEEMod default.

**Carbon Intensity Factors****Southern California Edison Carbon Intensity Factors**

SCE CO <sub>2</sub> e Intensity Factor <sup>1</sup>	512	pounds per megawatt hour
CO <sub>2</sub> : <sup>1,2</sup>	509.983	pounds per megawatt hour
CH <sub>4</sub> : <sup>3</sup>	0.033	pound per megawatt hour
N <sub>2</sub> O: <sup>3</sup>	0.004	pound per megawatt hour

<sup>1</sup> Based on CO<sub>2</sub>e intensity factor of 512 pounds per megawatt hour; Southern California Edison. 2020. 2020 Sustainability Report.

<https://www.edison.com/content/dam/eix/documents/sustainability/eix-2020-sustainability-report.pdf>

<sup>2</sup> Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH<sub>4</sub> and N<sub>2</sub>O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

<sup>3</sup> CalEEMod default values.

**General Conversion Factors**

lbs to kg	0.4536
kg to MTons	0.001
Mmbtu to Therm	0.1
Therms to kwh	29.30711111
kilowatt hrs to megawatt hrs	0.001
lbs to Tons	2000
Tons to MTON	0.9071847

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

**Global Warming Potentials (GWP)**

CO <sub>2</sub>	1
CH <sub>4</sub>	25
N <sub>2</sub> O	298

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

**Energy**

Utilizes CalEEMod default energy rates.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier*	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area (BSF)*	Total Paintable Exterior Surface Area (BSF)*
Educational	396,447	2.0	792,894	594,671	198,224
			<b>Non-Residential Total</b>	<b>594,671</b>	<b>198,224</b>
Parking Lot	321,399	6%	19,284	0	19,284
			<b>Parking Total</b>	<b>0</b>	<b>19,284</b>

\*Based on CalEEMod methodology in calculating the paintable surface areas for a residential and nonresidential building and parking lots.

### Changes to the CalEEMod Defaults - Fleet Mix 2021

Passenger Trips: 18,982

Commercial Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.530515	0.055377	0.171759	0.144367	0.028476	0.007361	0.011734	0.017293	0.000580	0.000260	0.025722	0.000955	0.005601	100%
Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	96%						2%	2%						100%
Proportion Assumed Mix	0.550568	0.057470	0.178251	0.149824	0.029552	0.007639	0.613382	1.000000	0.030319	0.013591	0.026694	0.049922	0.292786	100.00%
	99.95%						0.02%	0.03%						
adjusted with Assumed Trips	0.550278	0.057440	0.178158	0.149745	0.029537	0.007635	0.000129	0.000316	0.000006	0.000003	0.026680	0.000011	0.000062	100%
Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55%	6%	18%	15%	3%	1%	0.02%	0.03%	0%	0%	3%	0%	0%	100%
<b>Modified</b>	<b>0.550278</b>	<b>0.057440</b>	<b>0.178158</b>	<b>0.149745</b>	<b>0.029537</b>	<b>0.007635</b>	<b>0.000211</b>	<b>0.000316</b>	<b>0.000000</b>	<b>0.000000</b>	<b>0.026680</b>	<b>0.000000</b>	<b>0.000000</b>	<b>100.0%</b>
Final Check Trips	10,445	1,090	3,382	2,842	561	145	4	6	0	0	506	0	0	18,982
	100%						0%	0%						

**Changes to the CalEEMod Defaults - Fleet Mix 2050**

Passenger Trips: 18,982

Commercial Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.558039	0.060650	0.178875	0.120770	0.020934	0.006143	0.012443	0.015691	0.000493	0.000199	0.022232	0.000895	0.002635	100%
Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	97%						2%	2%						100%
Proportion Assumed Mix	0.576699	0.062678	0.184856	0.124808	0.021634	0.006348	0.746655	1.000000	0.029583	0.011941	0.022975	0.053705	0.158116	100.00%
	99.95%						0.02%	0.03%						
adjusted with Assumed Trips	0.576395	0.062645	0.184759	0.124743	0.021623	0.006345	0.000157	0.000316	0.000006	0.000003	0.022963	0.000011	0.000033	100%
Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	58%	6%	18%	12%	2%	1%	0.02%	0.03%	0%	0%	2%	0%	0%	100%
<b>Modified</b>	<b>0.576395</b>	<b>0.062645</b>	<b>0.184759</b>	<b>0.124743</b>	<b>0.021623</b>	<b>0.006345</b>	<b>0.000211</b>	<b>0.000316</b>	<b>0.000000</b>	<b>0.000000</b>	<b>0.022963</b>	<b>0.000000</b>	<b>0.000000</b>	<b>100.0%</b>
Final Check Trips	10,941	1,189	3,507	2,368	410	120	4	6	0	0	436	0	0	18,982

**Construction Activities and Schedule Assumptions:\***

\* Based on CalEEMod 2020.4.0 defaults and anticipated buildout dates.

Construction Activities	Construction Schedule			
	Start Date	End Date	Duration (Calendar Days)	Duration (Work Days)
<b>Phase 1</b>				
Demolition	1/1/2026	1/28/2026	27	20
Site Preparation	1/29/2026	2/11/2026	13	10
Grading	2/12/2026	3/25/2026	41	30
Building Construction	3/26/2026	5/19/2027	419	300
Paving	5/20/2027	6/16/2027	27	20
Architectural Coating	6/17/2027	7/14/2027	27	20
<b>Phase 2</b>				
Demolition	8/1/2030	8/28/2030	27	20
Site Preparation	8/29/2030	8/30/2030	1	2
Grading	8/31/2030	9/5/2030	5	4
Building Construction	9/6/2030	6/12/2031	279	200
Paving	6/13/2031	6/26/2031	13	10
Architectural Coating	6/27/2031	7/10/2031	13	10
<b>Phase 3</b>				
Site Preparation	2/13/2038	2/15/2038	2	1
Grading	2/16/2038	2/17/2038	1	2
Building Construction	2/18/2038	7/7/2038	139	100
Paving	7/8/2038	7/14/2038	6	5
Architectural Coating	7/15/2038	7/21/2038	6	5
<b>Phase 4</b>				
Demolition	2/3/2042	2/14/2042	11	10
Site Preparation	2/15/2042	2/17/2042	2	1
Grading	2/18/2042	2/19/2042	1	2
Building Construction	2/20/2042	7/9/2042	139	100
Paving	7/10/2042	7/16/2042	6	5
Architectural Coating	7/17/2042	7/23/2042	6	5
<b>Phase 5*</b>				
Demolition	1/1/2049	1/28/2049	27	20
Site Preparation	1/29/2049	2/11/2049	13	10
Grading	2/12/2049	3/25/2049	41	30
Building Construction	3/26/2049	5/19/2050	419	300
Paving	5/20/2050	6/16/2050	27	20
Architectural Coating	6/17/2050	7/14/2050	27	20

\*Phase 5 is anticipated to be completed in year 2051. However, modeling is based on a start year of 2049 because CalEEMod does not provide on-road vehicle emissions data beyond year 2050.

**CalEEMod Project Characteristics Inputs (Construction): Phase 1**

Name: Chaffey College - Rancho Cucamonga Campa  
 County/Air Basin: San Bernardino (SC)  
 Climate Zone: 10  
 Land Use Setting: Urban  
 Operational Year: 2027  
 Utility Company: SCE  
 Air Basin: SoCAB  
 Air District: South Coast AQMD  
 SRA: 32 - Northwest San Bernardino Valley

Construction Site Area 13.89 acres

Land Use	Existing Land Use Square Feet	Existing Demolished Land Use Square Feet	Existing Remaining Land Use Square Feet	Proposed New Land Use Square Feet	Total Land Use square feet	Renovation Land Use square feet
College	588,479					
Phase 1	588,479	37,462	551,017	105,600	656,617	39,312
<b>Other Use<sup>1</sup></b>						
Parking Lot	321,399	square feet				
Non-Parking Asphalt	230,673	square feet				

<sup>1</sup> For purposes of this analysis, assumes would be constructed in Phase 1.

**CalEEMod Land Use Inputs**

Land Use	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational <sup>1</sup>	Junior College ( 2 year)	144.912	1000 BSF	1.21	144,912
Parking Lot	Parking Lot	321.399	1000 BSF	7.378	321,399
Parking Lot	Other Asphalt	230.673	1000 BSF	5.296	230,673

<sup>1</sup> Includes proposed new and renovation building square footage.

**Demolition Haul**

Phases	Amount to be Hauled					
	(tons) <sup>1</sup>	Haul Truck Capacity (tons) <sup>2</sup>	Haul Distance (miles) <sup>2</sup>	Total Trip Ends	Duration (days)	Trip Ends/Day
Building Demo Debris Haul	1,723	20.23	20.0	172	20	9

<sup>1</sup> Based on CalEEMod 2020.4.0 conversion factor of 0.046 ton/building square foot.

<sup>2</sup> CalEEMod default.

Phases	Amount to be Hauled					
	(tons) <sup>1</sup>	Haul Truck Capacity (tons) <sup>2</sup>	Haul Distance (miles) <sup>2</sup>	Total Trip Ends	Duration (days)	Trip Ends/Day
Asphalt Demo Debris Haul	1,228	20.23	20.0	122	20	7

<sup>1</sup> Based on measurement of areas anticipated to be demolished using Google Earth Pro.

<sup>2</sup> CalEEMod default.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier <sup>1</sup>	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area	Total Paintable Exterior Surface
				(BSF) <sup>2</sup>	Area (BSF) <sup>2</sup>
Junior College ( 2 year)	144,912	2.0	289,824	217,368	72,456
			<b>Building Total</b>	<b>217,368</b>	<b>72,456</b>
Parking Lot	321,399	6%	19,284	0	19,284
			<b>Parking Total</b>	<b>0</b>	<b>19,284</b>

<sup>1</sup> CalEEMod methodology calculates the paintable interior and exterior areas of a building by multiplying the total paintable surface area by 75 and 25 percent, respectively. For parking lots, the paintable surface area is based on 6 percent of the total surface area of the parking lot.

**Construction - Unmitigated Run**

**South Coast AQMD Rule 403**

Replace Ground Cover  
 PM10: 5 % Reduction  
 PM25: 5 % Reduction

Water Exposed Area  
 Frequency: 2 per day  
 PM10: 55 % Reduction  
 PM25: 55 % Reduction

Unpaved Roads  
 Vehicle Speed: 15 mph

**South Coast AQMD Rule 1186**

Clean Paved Road  
9 % PM Reduction

**CalEEMod Project Characteristics Inputs (Construction): Phase2**

Name: Chaffey College - Rancho Cucamonga Campa  
 County/Air Basin: San Bernardino (SC)  
 Climate Zone: 10  
 Land Use Setting: Urban  
 Operational Year: 2031  
 Utility Company: SCE  
 Air Basin: SoCAB  
 Air District: South Coast AQMD  
 SRA: 32 - Northwest San Bernardino Valley

Construction Site Area 1.23 acres

Land Use	Existing Land Use Square Feet	Existing Demolished Land Use Square Feet	Existing Remaining Land Use Square Feet	Proposed New Land Use Square Feet	Total Land Use square feet	Renovation Land Use square feet
College	588,479	0				
Phase 1	588,479	37,462	551,017	105,600	656,617	39,312
Phase 2	551,017	80,669	470,348	106,759	682,707	24,828

**CalEEMod Land Use Inputs**

Land Use	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational <sup>1</sup>	Junior College ( 2 year)	131.587	1000 BSF	1.23	131,587

<sup>1</sup> Includes proposed new and renovation building square footage.

**Demolition Haul**

Phases	Amount to be Hauled			Total Trip Ends	Duration (days)	Trip Ends/Day
	(tons) <sup>1</sup>	Haul Truck Capacity (tons) <sup>2</sup>	Haul Distance (miles) <sup>2</sup>			
Building Demo Debris Haul	3,711	20.23	20.0	368	20	19

<sup>1</sup> Based on CalEEMod 2020.4.0 conversion factor of 0.046 ton/buildng square foot.

<sup>2</sup> CalEEMod default.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier <sup>1</sup>	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area	Total Paintable Exterior Surface
				(BSF) <sup>2</sup>	Area (BSF) <sup>2</sup>
Junior College ( 2 year)	131,587	2.0	263,174	197,381	65,794
			<b>Building Total</b>	<b>197,381</b>	<b>65,794</b>

<sup>1</sup> CalEEMod default.

<sup>2</sup> CalEEMod methodology calculates the paintable interior and exterior areas of a building by multiplying the total paintable surface area by 75 and 25 percent, respectively.

**Construction - Unmitigated Run**

**South Coast AQMD Rule 403**

Replace Ground Cover  
 PM10: 5 % Reduction  
 PM25: 5 % Reduction

Water Exposed Area  
 Frequency: 2 per day  
 PM10: 55 % Reduction  
 PM25: 55 % Reduction

Unpaved Roads  
 Vehicle Speed: 15 mph

**South Coast AQMD Rule 1186**

Clean Paved Road 9 % PM Reduction

**CalEEMod Project Characteristics Inputs (Construction): Phase 3**

Name: Chaffey College - Rancho Cucamonga Campa  
 County/Air Basin: San Bernardino (SC)  
 Climate Zone: 10  
 Land Use Setting: Urban  
 Operational Year: 2038  
 Utility Company: SCE  
 Air Basin: SoCAB  
 Air District: South Coast AQMD  
 SRA: 32 - Northwest San Bernardino Valley

Construction Site Area 0.30 acres

Land Use	Existing Land Use Square Feet	Existing Demolished Land Use Square Feet	Existing Remaining Land Use Square Feet	Proposed New Land Use Square Feet	Total Land Use square feet	Renovation Land Use square feet
College	588,479	0				
Phase 1	588,479	37,462	551,017	105,600	656,617	39,312
Phase 2	551,017	80,669	470,348	106,759	682,707	24,828
Phase 3	470,348	0	470,348	13,200	695,907	36,936

**CalEEMod Land Use Inputs**

Land Use	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational <sup>1</sup>	Junior College ( 2 year)	50.136	1000 BSF	0.30	50,136

<sup>1</sup> Includes proposed new and renovation building square footage.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier <sup>1</sup>	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area (BSF) <sup>2</sup>	Total Paintable Exterior Surface Area (BSF) <sup>2</sup>
Junior College ( 2 year)	50,136	2.0	100,272	75,204	25,068
			<b>Building Total</b>	<b>75,204</b>	<b>25,068</b>

<sup>1</sup> CalEEMod default.

<sup>2</sup> CalEEMod methodology calculates the paintable interior and exterior areas of a building by multiplying the total paintable surface area by 75 and 25 percent, respectively.

**Construction - Unmitigated Run**

**SCAQMD Rule 403**

Replace Ground Cover PM10: 5 % Reduction  
 PM25: 5 % Reduction

Water Exposed Area Frequency: 2 per day  
 PM10: 55 % Reduction  
 PM25: 55 % Reduction

Unpaved Roads Vehicle Speed: 15 mph

**SCAQMD Rule 1186**

Clean Paved Road 9 % PM Reduction



**CalEEMod Project Characteristics Inputs (Construction): Phase 4**

Name: Chaffey College - Rancho Cucamonga Campa  
 County/Air Basin: San Bernardino (SC)  
 Climate Zone: 10  
 Land Use Setting: Urban  
 Operational Year: 2042  
 Utility Company: SCE  
 Air Basin: SoCAB  
 Air District: South Coast AQMD  
 SRA: 32 - Northwest San Bernardino Valley

Construction Site Area 0.73 acres

Land Use	Existing Land Use Square Feet	Existing Demolished Land Use Square Feet	Existing Remaining Land Use Square Feet	Proposed New Land Use Square Feet	Total Land Use square feet	Renovation Land Use square feet
College	588,479	0				
Phase 1	588,479	37,462	551,017	105,600	656,617	39,312
Phase 2	551,017	80,669	470,348	106,759	682,707	24,828
Phase 3	470,348	0	470,348	13,200	695,907	36,936
Phase 4	470,348	28,879	441,469	63,500	730,528	45,254

**CalEEMod Land Use Inputs**

Land Use	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational <sup>1</sup>	Junior College ( 2 year)	108.754	1000 BSF	0.73	108,754

<sup>1</sup> Includes proposed new and renovation building square footage.

**Demolition Haul**

Phases	Amount to be Hauled			Total Trip Ends	Duration (days)	Trip Ends/Day
	(tons) <sup>1</sup>	Haul Truck Capacity (tons) <sup>2</sup>	Haul Distance (miles) <sup>2</sup>			
Building Demo Debris Haul	1,328	20.23	20.0	132	10	14

<sup>1</sup> Based on CalEEMod 2020.4.0 conversion factor of 0.046 ton/building square foot.

<sup>2</sup> CalEEMod default.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier <sup>1</sup>	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area	Total Paintable Exterior Surface Area
				(BSF) <sup>2</sup>	Area (BSF) <sup>2</sup>
Junior College ( 2 year)	108,754	2.0	217,508	163,131	54,377
			<b>Building Total</b>	<b>163,131</b>	<b>54,377</b>

<sup>1</sup> CalEEMod default.

<sup>2</sup> CalEEMod methodology calculates the paintable interior and exterior areas of a building by multiplying the total paintable surface area by 75 and 25 percent, respectively.

**Construction - Unmitigated Run**

**South Coast AQMD Rule 403**

Replace Ground Cover PM10: 5 % Reduction  
 PM25: 5 % Reduction

Water Exposed Area Frequency: 2 per day  
 PM10: 55 % Reduction  
 PM25: 55 % Reduction

Unpaved Roads Vehicle Speed: 15 mph

**South Coast AQMD Rule 1186**

Clean Paved Road 9 % PM Reduction

**CalEEMod Project Characteristics Inputs (Construction): Phase 5**

Name: Chaffey College - Rancho Cucamonga Campa  
 County/Air Basin: San Bernardino (SC)  
 Climate Zone: 10  
 Land Use Setting: Urban  
 Operational Year: 2051  
 Utility Company: SCE  
 Air Basin: SoCAB  
 Air District: South Coast AQMD  
 SRA: 32 - Northwest San Bernardino Valley

Construction Site Area 17.30 acres

Land Use	Existing Land Use Square Feet	Existing Demolished Land Use Square Feet	Existing Remaining Land Use Square Feet	Proposed New Land Use Square Feet	Total Land Use square feet	Renovation Land Use square feet
College	588,479	0				
Phase 1	588,479	37,462	551,017	105,600	656,617	39,312
Phase 2	551,017	80,669	470,348	106,759	682,707	24,828
Phase 3	470,348	0	470,348	13,200	695,907	36,936
Phase 4	470,348	28,879	441,469	63,500	730,528	45,254
Phase 5	441,469	79,654	361,815	107,388	758,262	51,278
<b>Total</b>	<b>n/a</b>	<b>226,664</b>	<b>361,815</b>	<b>396,447</b>	<b>758,262</b>	
<b>Other Renovation</b>						
Track	179,431	square feet				
Other Fields	507,642	square feet				

**CalEEMod Land Use Inputs**

Land Use	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational <sup>1</sup>	Junior College ( 2 year)	158.666	1000 BSF	1.52	158,666
Parking Lot	Other Non Asphalt Surface	687.073	1000 BSF	15.773	0

<sup>1</sup> Includes proposed new and renovation building square footage.

**Demolition Haul**

Phases	Amount to be Hauled			Total Trip Ends	Duration (days)	Trip Ends/Day
	(tons) <sup>1</sup>	Haul Truck Capacity (tons) <sup>2</sup>	Haul Distance (miles) <sup>2</sup>			
Building Demo Debris Haul	3,664	20.23	20.0	364	20	19

<sup>1</sup> Based on CalEEMod 2020.4.0 conversion factor of 0.046 ton/buildng square foot.

<sup>2</sup> CalEEMod default.

**Architectural Coating**

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier <sup>1</sup>	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area	Total Paintable Exterior Surface
				(BSF) <sup>2</sup>	Area (BSF) <sup>2</sup>
Junior College ( 2 year)	158,666	2.0	317,332	237,999	79,333
			<b>Building Total</b>	<b>237,999</b>	<b>79,333</b>

<sup>1</sup> CalEEMod default.

<sup>2</sup> CalEEMod methodology calculates the paintable interior and exterior areas of a building by multiplying the total paintable surface area by 75 and 25 percent, respectively.

**Construction - Unmitigated Run**

**South Coast AQMD Rule 403**

Replace Ground Cover  
 PM10: 5 % Reduction  
 PM25: 5 % Reduction

Water Exposed Area  
 Frequency: 2 per day  
 PM10: 55 % Reduction  
 PM25: 55 % Reduction

Unpaved Roads  
 Vehicle Speed: 15 mph

**South Coast AQMD Rule 1186**

Clean Paved Road 9 % PM Reduction

## Pavement Volume to Weight Conversion

Component	Total SF of Area <sup>1</sup>	Assumed Thickness (foot) <sup>2</sup>	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf) <sup>3</sup>	AC Mass (lbs)	AC Mass (tons)
Asphalt Demo	11,416	0.451	5,147	89	457,486	228.74
	5,877	0.451	2,650	89	235,515	117.76
	7,036	0.451	3,172	89	281,961	140.98
	36,980	0.451	16,672	89	1,481,939	740.97
<b>Total</b>	61,309					1,228

<sup>1</sup> Based on aerial image of existing roadway segment.

<sup>2</sup> Based on roadway project.

<sup>3</sup> <https://www.calrecycle.ca.gov/swfacilities/cdi/Tools/Calculations>

**Summarized Construction Equipment List: Phase 1\***

*\*Based on CalEEMod 2020.4.0 defaults.*

Construction Activity	Equipment Type	Number of Equipment	Hours/Day	Horsepower	Load Factor	Construction	
						Trips	Vendor Trips
<b>Demolition</b>						<b>15</b>	<b>24</b>
	Concrete/Industrial Saws	1	8	81	0.73		
	Excavators	3	8	158	0.38		
	Rubber Tired Dozers	2	8	247	0.4		
	Water Truck	2					4
<b>Site Preparation</b>						<b>18</b>	<b>8</b>
	Rubber Tired Dozers	3	8	247	0.4		
	Tractors/Loaders/Backhoes	4	8	97	0.37		
	Water Truck*	4					8
<b>Rough Grading</b>						<b>20</b>	<b>16</b>
	Excavators	2	8	158	0.38		
	Graders	1	8	187	0.41		
	Rubber Tired Dozers	1	8	247	0.4		
	Scrapers	2	8	367	0.48		
	Tractors/Loaders/Backhoes	2	8	97	0.37		
	Water Truck*	8					16
<b>Building Construction</b>						<b>293</b>	<b>114</b>
	Cranes	1	7	231	0.29		
	Forklifts	3	8	89	0.2		
	Generator Sets	1	8	84	0.74		
	Tractors/Loaders/Backhoes	3	7	97	0.37		
	Welders	1	8	46	0.45		
<b>Asphalt Paving</b>						<b>15</b>	<b>0</b>
	Pavers	2	8	130	0.42		
	Paving Equipment	2	8	132	0.36		
	Rollers	2	8	80	0.38		
<b>Architectural Coating</b>						<b>59</b>	<b>0</b>
	Air Compressors	1	6	78	0.48		

*\*Based on 10,000 gallons per acres disturbed and a 4,000 gallon water truck. 2005, June 5. Maricopa Air Quality Department. Guidance for Application for Dust Control Permit.*

## Summarized Construction Equipment List: Phase 2\*

\*Based on CalEEMod 2020.4.0 defaults.

Construction Activity	Equipment Type	Number of Equipment	Hours/Day	Horsepower	Load Factor	Construction	
						Trips	Vendor Trips
<b>Demolition</b>						<b>13</b>	<b>4</b>
	Concrete/Industrial Saws	1	8	81	0.73		
	Rubber Tired Dozers	1	8	247	0.4		
	Tractors/Loaders/Backhoes	3	8	97	0.37		
	Water Truck	2					4
<b>Site Preparation</b>						<b>8</b>	<b>4</b>
	Graders	1	8	187	0.41		
	Rubber Tired Dozers	1	7	247	0.4		
	Tractors/Loaders/Backhoes	1	8	97	0.37		
	Water Truck*	2					4
<b>Grading</b>						<b>10</b>	<b>6</b>
	Graders	1	8	187	0.41		
	Rubber Tired Dozers	1	8	247	0.4		
	Tractors/Loaders/Backhoes	2	7	97	0.37		
	Water Truck*	3					6
<b>Building Construction</b>						<b>55</b>	<b>22</b>
	Cranes	1	6	231	0.29		
	Forklifts	1	6	89	0.2		
	Generator Sets	1	8	84	0.74		
	Tractors/Loaders/Backhoes	1	6	97	0.37		
	Welders	3	8	46	0.45		
<b>Asphalt Paving</b>						<b>13</b>	<b>0</b>
	Cement and Mortar Mixers	1	6	9	0.56		
	Pavers	1	6	130	0.42		
	Paving Equipment	1	8	132	0.36		
	Rollers	1	7	80	0.38		
	Tractors/Loaders/Backhoes	1	8	97	0.37		
<b>Architectural Coating</b>						<b>11</b>	<b>0</b>
	Air Compressors	1	6	78	0.48		

\*Based on 10,000 gallons per acres disturbed and a 4,000 gallon water truck. 2005, June 5. Maricopa Air Quality Department. Guidance for Application for Dust Control Permit.

**Summarized Construction Equipment List: Phase 3\***

*\*Based on CalEEMod 2020.4.0 defaults.*

Construction Activity	Equipment Type	Number of Equipment	Hours/Day	Horsepower	Load Factor	Construction	
						Trips	Vendor Trips
<b>Site Preparation</b>						<b>5</b>	<b>2</b>
	Graders	1	8	187	0.41		
	Tractors/Loaders/Backhoes	1	8	97	0.37		
	Water Truck*	1					2
<b>Grading</b>						<b>8</b>	<b>4</b>
	Graders	1	6	187	0.41		
	Rubber Tired Dozers	1	6	247	0.4		
	Tractors/Loaders/Backhoes	1	7	97	0.37		
	Water Truck*	2					4
<b>Building Construction</b>						<b>21</b>	<b>8</b>
	Cranes	1	4	231	0.29		
	Forklifts	2	6	89	0.2		
	Tractors/Loaders/Backhoes	2	8	97	0.37		
<b>Asphalt Paving</b>						<b>18</b>	<b>0</b>
	Cement and Mortar Mixers	4	6	9	0.56		
	Pavers	1	7	130	0.42		
	Rollers	1	7	80	0.38		
	Tractors/Loaders/Backhoes	1	7	97	0.37		
<b>Architectural Coating</b>						<b>4</b>	<b>0</b>
	Air Compressors	1	6	78	0.48		

*\*Based on 10,000 gallons per acres disturbed and a 4,000 gallon water truck. 2005, June 5. Maricopa Air Quality Department. Guidance for Application for Dust Control Permit.*

### Summarized Construction Equipment List: Phase 4\*

\*Based on CalEEMod 2020.4.0 defaults.

Construction Activity	Equipment Type	Number of Equipment	Hours/Day	Horsepower	Load Factor	Construction	
						Trips	Vendor Trips
<b>Demolition</b>						<b>10</b>	<b>4</b>
	Concrete/Industrial Saws	1	8	81	0.73		
	Rubber Tired Dozers	1	8	247	0.4		
	Tractors/Loaders/Backhoes	2	8	97	0.37		
	Water Truck	2					4
<b>Site Preparation</b>						<b>5</b>	<b>2</b>
	Graders	1	8	187	0.41		
	Tractors/Loaders/Backhoes	1	8	97	0.37		
	Water Truck*	1					2
<b>Grading</b>						<b>8</b>	<b>4</b>
	Graders	1	6	187	0.41		
	Rubber Tired Dozers	1	6	247	0.4		
	Tractors/Loaders/Backhoes	1	7	97	0.37		
	Water Truck*	2					4
<b>Building Construction</b>						<b>46</b>	<b>18</b>
	Cranes	1	4	231	0.29		
	Forklifts	2	6	89	0.2		
	Tractors/Loaders/Backhoes	2	8	97	0.37		
<b>Asphalt Paving</b>						<b>18</b>	<b>0</b>
	Cement and Mortar Mixers	4	6	9	0.56		
	Pavers	1	7	130	0.42		
	Rollers	1	7	80	0.38		
	Tractors/Loaders/Backhoes	1	7	97	0.37		
<b>Architectural Coating</b>						<b>9</b>	<b>0</b>
	Air Compressors	1	6	78	0.48		

\*Based on 10,000 gallons per acres disturbed and a 4,000 gallon water truck. 2005, June 5. Maricopa Air Quality Department. Guidance for Application for Dust Control Permit.

**Summarized Construction Equipment List: Phase 5\***

*\*Based on CalEEMod 2020.4.0 defaults.*

Construction Activity	Equipment Type	Number of Equipment	Hours/Day	Horsepower	Load Factor	Construction	
						Trips	Vendor Trips
<b>Demolition</b>						<b>15</b>	<b>4</b>
	Concrete/Industrial Saws	1	8	81	0.73		
	Excavators	3	8	158	0.38		
	Rubber Tired Dozers	2	8	247	0.4		
	Water Truck	2					4
<b>Site Preparation</b>						<b>18</b>	<b>8</b>
	Rubber Tired Dozers	3	8	247	0.4		
	Tractors/Loaders/Backhoes	4	8	97	0.37		
	Water Truck*	4					8
<b>Grading</b>						<b>20</b>	<b>16</b>
	Excavators	2	8	158	0.38		
	Graders	1	8	187	0.41		
	Rubber Tired Dozers	1	8	247	0.4		
	Scrapers	2	8	367	0.48		
	Tractors/Loaders/Backhoes	2	8	97	0.37		
	Water Truck*	8					16
<b>Building Construction</b>						<b>67</b>	<b>26</b>
	Cranes	1	7	231	0.29		
	Forklifts	3	8	89	0.2		
	Generator Sets	1	8	84	0.74		
	Tractors/Loaders/Backhoes	3	7	97	0.37		
	Welders	1	8	46	0.45		
<b>Asphalt Paving</b>						<b>15</b>	<b>0</b>
	Pavers	2	8	130	0.42		
	Paving Equipment	2	8	132	0.36		
	Rollers	2	8	80	0.38		
<b>Architectural Coating</b>						<b>13</b>	<b>0</b>
	Air Compressors	1	6	78	0.48		

*\*Based on 10,000 gallons per acres disturbed and a 4,000 gallon water truck. 2005, June 5. Maricopa Air Quality Department. Guidance for Application for Dust Control Permit.*



**Construction-Related Vehicle Trips Worksheet**

	Daily Worker Trips	Daily Vendor Trips	Daily Haul Trips	Total Haul Trips	Start	End	Duration
<b>Phase 1</b>							
Demolition	15	4	16	294	2026/01/01	2026/01/28	20
Site Preparation	18	8	0	0	2026/01/29	2026/02/11	10
Grading	20	16	0	0	2026/02/12	2026/03/25	30
Building Construction	293	114	0	0	2026/03/26	2027/05/19	300
Paving	15	0	0	0	2027/05/20	2027/06/16	20
Architectural Coating	59	0	0	0	2027/06/17	2027/07/14	20
<b>Phase 2</b>							
Demolition	13	4	20	368	2030/08/01	2030/08/28	20
Site Preparation	8	4	0	0	2030/08/29	2030/08/30	2
Grading	10	6	0	0	2030/08/31	2030/09/05	4
Building Construction	55	22	0	0	2030/09/06	2031/06/12	200
Paving	13	0	0	0	2031/06/13	2031/06/26	10
Architectural Coating	11	0	0	0	2031/06/27	2031/07/10	10
<b>Phase 3</b>							
Site Preparation	5	2	0	0	2038/02/13	2038/02/15	1
Grading	8	4	0	0	2038/02/16	2038/02/17	2
Building Construction	21	8	0	0	2038/02/18	2038/07/07	100
Paving	18	0	0	0	2038/07/08	2038/07/14	5
Architectural Coating	4	0	0	0	2038/07/15	2038/07/21	5
<b>Phase 4</b>							
Demolition	10	4	14	132	2042/02/03	2042/02/14	10
Site Preparation	5	2	0	0	2042/02/15	2042/02/17	1
Grading	8	4	0	0	2042/02/18	2042/02/19	2
Building Construction	46	18	0	0	2042/02/20	2042/07/09	100
Paving	18	0	0	0	2042/07/10	2042/07/16	5
Architectural Coating	9	0	0	0	2042/07/17	2042/07/23	5
<b>Phase 5</b>							
Demolition	15	4	20	364	2049/01/01	2049/01/28	20
Site Preparation	18	8	0	0	2049/01/29	2049/02/11	10
Grading	20	16	0	0	2049/02/12	2049/03/25	30
Building Construction	67	26	0	0	2049/03/26	2050/05/19	300
Paving	15	0	0	0	2050/05/20	2050/06/16	20
Architectural Coating	13	0	0	0	2050/06/17	2050/07/14	20

**Adjusted Trips**

Construction Scenario	Daily Worker Trips	Daily Vendor Trips	Daily Haul Trips	Total Daily Trips	Start Date	End Date	Workdays
<b>Phase 1</b>							
Demolition	15	4	16	35	2026/01/01	2026/01/28	20
Site Preparation	18	8	0	26	2026/01/29	2026/02/11	10
Grading	20	16	0	36	2026/02/12	2026/03/25	30
Building Construction	293	114	0	407	2026/03/26	2027/05/19	300
Paving	15	0	0	15	2027/05/20	2027/06/16	20
Architectural Coating	59	0	0	59	2027/06/17	2027/07/14	20
<b>Max Daily</b>	<b>293</b>	<b>114</b>	<b>0</b>	<b>407</b>			
<b>Phase 2</b>							
Demolition	13	4	20	37	2030/08/01	2030/08/28	20
Site Preparation	8	4	0	12	2030/08/29	2030/08/30	2
Grading	10	6	0	16	2030/08/31	2030/09/05	4
Building Construction	55	22	0	77	2030/09/06	2031/06/12	200
Paving	13	0	0	13	2031/06/13	2031/06/26	10
Architectural Coating	11	0	0	11	2031/06/27	2031/07/10	10
<b>Max Daily</b>	<b>55</b>	<b>22</b>	<b>20</b>	<b>77</b>			
<b>Phase 3</b>							
Site Preparation	5	2	0	7	2038/02/13	2038/02/15	1
Grading	8	4	0	12	2038/02/16	2038/02/17	2
Building Construction	21	8	0	29	2038/02/18	2038/07/07	100
Paving	18	0	0	18	2038/07/08	2038/07/14	5
Architectural Coating	4	0	0	4	2038/07/15	2038/07/21	5
<b>Max Daily</b>	<b>21</b>	<b>8</b>	<b>0</b>	<b>29</b>			
<b>Phase 4</b>							
Demolition	10	4	14	28	2042/02/03	2042/02/14	10
Site Preparation	5	2	0	7	2042/02/15	2042/02/17	1
Grading	8	4	0	12	2042/02/18	2042/02/19	2
Building Construction	46	18	0	64	2042/02/20	2042/07/09	100
Paving	18	0	0	18	2042/07/10	2042/07/16	5
Architectural Coating	9	0	0	9	2042/07/17	2042/07/23	5
<b>Max Daily</b>	<b>46</b>	<b>18</b>	<b>14</b>	<b>64</b>			
<b>Phase 5</b>							
Demolition	15	4	20	39	2049/01/01	2049/01/28	20
Site Preparation	18	8	0	26	2049/01/29	2049/02/11	10
Grading	20	16	0	36	2049/02/12	2049/03/25	30
Building Construction	67	26	0	93	2049/03/26	2050/05/19	300
Paving	15	0	0	15	2050/05/20	2050/06/16	20
Architectural Coating	13	0	0	13	2050/06/17	2050/07/14	20
<b>Max Daily</b>	<b>67</b>	<b>26</b>	<b>20</b>	<b>93</b>			
<b>Overall Max Daily</b>	<b>293</b>	<b>114</b>	<b>20</b>	<b>407</b>			

### 3. CalEEMod Output: Phase 1 Construction

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Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction P1**

**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	144.91	1000sqft	1.21	144,912.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2027

**Utility Company**

<b>CO2 Intensity (lb/MWhr)</b>	0	<b>CH4 Intensity (lb/MWhr)</b>	0	<b>N2O Intensity (lb/MWhr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information received from the College District.

Trips and VMT - See the Construction Phase 1 modeling assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Architectural Coating - Based on new propose parking lot areas.

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	33,124.00	19,284.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.33	1.21
tblTripsAndVMT	HaulingTripNumber	292.00	294.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00

Construction P1 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblTripsAndVMT	VendorTripNumber	0.00	16.00
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**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	2.9821	28.5353	27.1660	0.0729	19.9095	1.1360	20.9992	10.1706	1.0453	11.1732	0.0000	7,419.5508	7,419.5508	1.9541	0.3629	7,545.3270
2027	71.9815	16.8686	26.0801	0.0717	4.0054	0.5699	4.5753	1.0789	0.5363	1.6152	0.0000	7,314.8594	7,314.8594	0.7162	0.3532	7,437.5775
<b>Maximum</b>	<b>71.9815</b>	<b>28.5353</b>	<b>27.1660</b>	<b>0.0729</b>	<b>19.9095</b>	<b>1.1360</b>	<b>20.9992</b>	<b>10.1706</b>	<b>1.0453</b>	<b>11.1732</b>	<b>0.0000</b>	<b>7,419.5508</b>	<b>7,419.5508</b>	<b>1.9541</b>	<b>0.3629</b>	<b>7,545.3270</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	2.9821	28.5353	27.1660	0.0729	8.6368	1.1360	9.7265	4.3822	1.0453	5.3849	0.0000	7,419.5508	7,419.5508	1.9541	0.3629	7,545.3270
2027	71.9815	16.8686	26.0801	0.0717	3.7023	0.5699	4.2723	1.0045	0.5363	1.5408	0.0000	7,314.8594	7,314.8594	0.7162	0.3532	7,437.5775
<b>Maximum</b>	<b>71.9815</b>	<b>28.5353</b>	<b>27.1660</b>	<b>0.0729</b>	<b>8.6368</b>	<b>1.1360</b>	<b>9.7265</b>	<b>4.3822</b>	<b>1.0453</b>	<b>5.3849</b>	<b>0.0000</b>	<b>7,419.5508</b>	<b>7,419.5508</b>	<b>1.9541</b>	<b>0.3629</b>	<b>7,545.3270</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>48.40</b>	<b>0.00</b>	<b>45.26</b>	<b>52.12</b>	<b>0.00</b>	<b>45.84</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	7/14/2027	5	20	

**Acres of Grading (Site Preparation Phase): 15**

**Acres of Grading (Grading Phase): 90**

**Acres of Paving: 12.68**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 217,368; Non-Residential Outdoor: 72,456; Striped Parking Area: 19,284**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Construction P1 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	294.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	293.00	114.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	59.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2026**

**Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					3.1585	0.0000	3.1585	0.4782	0.0000	0.4782			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606

Construction P1 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	2.0926	19.1966	19.4184	0.0388	3.1585	0.8528	4.0113	0.4782	0.7920	1.2702		3,747.5996	3,747.5996	1.0464		3,773.7606
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**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0345	1.5888	0.4919	7.7600e-003	0.2574	0.0166	0.2740	0.0706	0.0158	0.0864		846.0461	846.0461	0.0351	0.1341	886.8826
Vendor	4.4100e-003	0.1397	0.0562	6.8000e-004	0.0256	1.0300e-003	0.0267	7.3800e-003	9.9000e-004	8.3600e-003		72.7626	72.7626	1.8300e-003	0.0107	76.0062
Worker	0.0474	0.0253	0.4575	1.3600e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		142.7992	142.7992	2.6900e-003	2.9200e-003	143.7365
<b>Total</b>	<b>0.0864</b>	<b>1.7537</b>	<b>1.0057</b>	<b>9.8000e-003</b>	<b>0.4507</b>	<b>0.0183</b>	<b>0.4690</b>	<b>0.1224</b>	<b>0.0175</b>	<b>0.1399</b>		<b>1,061.6079</b>	<b>1,061.6079</b>	<b>0.0397</b>	<b>0.1477</b>	<b>1,106.6252</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3503	0.0000	1.3503	0.2044	0.0000	0.2044			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
<b>Total</b>	<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>	<b>1.3503</b>	<b>0.8528</b>	<b>2.2030</b>	<b>0.2044</b>	<b>0.7920</b>	<b>0.9964</b>	<b>0.0000</b>	<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>



Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0345	1.5888	0.4919	7.7600e-003	0.2399	0.0166	0.2565	0.0663	0.0158	0.0821		846.0461	846.0461	0.0351	0.1341	886.8826
Vendor	4.4100e-003	0.1397	0.0562	6.8000e-004	0.0240	1.0300e-003	0.0250	6.9800e-003	9.9000e-004	7.9600e-003		72.7626	72.7626	1.8300e-003	0.0107	76.0062
Worker	0.0474	0.0253	0.4575	1.3600e-003	0.1546	7.2000e-004	0.1553	0.0413	6.6000e-004	0.0419		142.7992	142.7992	2.6900e-003	2.9200e-003	143.7365
<b>Total</b>	<b>0.0864</b>	<b>1.7537</b>	<b>1.0057</b>	<b>9.8000e-003</b>	<b>0.4185</b>	<b>0.0183</b>	<b>0.4367</b>	<b>0.1145</b>	<b>0.0175</b>	<b>0.1320</b>		<b>1,061.6079</b>	<b>1,061.6079</b>	<b>0.0397</b>	<b>0.1477</b>	<b>1,106.6252</b>

**3.3 Site Preparation - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
<b>Total</b>	<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>19.6570</b>	<b>1.0868</b>	<b>20.7438</b>	<b>10.1025</b>	<b>0.9999</b>	<b>11.1023</b>		<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>		<b>3,718.9320</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	8.8200e-003	0.2793	0.1125	1.3600e-003	0.0513	2.0600e-003	0.0533	0.0148	1.9700e-003	0.0167	145.5251	145.5251	3.6600e-003	0.0215	152.0124	
Worker	0.0569	0.0304	0.5490	1.6300e-003	0.2012	8.6000e-004	0.2021	0.0534	7.9000e-004	0.0542	171.3590	171.3590	3.2300e-003	3.5000e-003	172.4838	
<b>Total</b>	<b>0.0658</b>	<b>0.3097</b>	<b>0.6614</b>	<b>2.9900e-003</b>	<b>0.2525</b>	<b>2.9200e-003</b>	<b>0.2554</b>	<b>0.0681</b>	<b>2.7600e-003</b>	<b>0.0709</b>	<b>316.8841</b>	<b>316.8841</b>	<b>6.8900e-003</b>	<b>0.0250</b>	<b>324.4962</b>	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
<b>Total</b>	<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>8.4034</b>	<b>1.0868</b>	<b>9.4902</b>	<b>4.3188</b>	<b>0.9999</b>	<b>5.3187</b>	<b>0.0000</b>	<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>		<b>3,718.9320</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8200e-003	0.2793	0.1125	1.3600e-003	0.0480	2.0600e-003	0.0500	0.0140	1.9700e-003	0.0159		145.5251	145.5251	3.6600e-003	0.0215	152.0124

Construction P1 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0569	0.0304	0.5490	1.6300e-003	0.1855	8.6000e-004	0.1863	0.0495	7.9000e-004	0.0503		171.3590	171.3590	3.2300e-003	3.5000e-003	172.4838
<b>Total</b>	<b>0.0658</b>	<b>0.3097</b>	<b>0.6614</b>	<b>2.9900e-003</b>	<b>0.2334</b>	<b>2.9200e-003</b>	<b>0.2364</b>	<b>0.0634</b>	<b>2.7600e-003</b>	<b>0.0662</b>		<b>316.8841</b>	<b>316.8841</b>	<b>6.8900e-003</b>	<b>0.0250</b>	<b>324.4962</b>

**3.4 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>9.2036</b>	<b>1.1309</b>	<b>10.3345</b>	<b>3.6538</b>	<b>1.0404</b>	<b>4.6942</b>		<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0176	0.5587	0.2249	2.7100e-003	0.1025	4.1200e-003	0.1066	0.0295	3.9400e-003	0.0335		291.0502	291.0502	7.3300e-003	0.0429	304.0248
Worker	0.0633	0.0337	0.6100	1.8100e-003	0.2236	9.6000e-004	0.2245	0.0593	8.8000e-004	0.0602		190.3989	190.3989	3.5900e-003	3.8900e-003	191.6488
<b>Total</b>	<b>0.0809</b>	<b>0.5924</b>	<b>0.8349</b>	<b>4.5200e-003</b>	<b>0.3261</b>	<b>5.0800e-003</b>	<b>0.3311</b>	<b>0.0888</b>	<b>4.8200e-003</b>	<b>0.0936</b>		<b>481.4491</b>	<b>481.4491</b>	<b>0.0109</b>	<b>0.0468</b>	<b>495.6734</b>

Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9345	0.0000	3.9345	1.5620	0.0000	1.5620			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>3.9345</b>	<b>1.1309</b>	<b>5.0654</b>	<b>1.5620</b>	<b>1.0404</b>	<b>2.6024</b>	<b>0.0000</b>	<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0176	0.5587	0.2249	2.7100e-003	0.0959	4.1200e-003	0.1001	0.0279	3.9400e-003	0.0319		291.0502	291.0502	7.3300e-003	0.0429	304.0248
Worker	0.0633	0.0337	0.6100	1.8100e-003	0.2061	9.6000e-004	0.2070	0.0550	8.8000e-004	0.0559		190.3989	190.3989	3.5900e-003	3.8900e-003	191.6486
<b>Total</b>	<b>0.0809</b>	<b>0.5924</b>	<b>0.8349</b>	<b>4.5200e-003</b>	<b>0.3020</b>	<b>5.0800e-003</b>	<b>0.3071</b>	<b>0.0829</b>	<b>4.8200e-003</b>	<b>0.0877</b>		<b>481.4491</b>	<b>481.4491</b>	<b>0.0109</b>	<b>0.0468</b>	<b>495.6734</b>

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1256	3.9804	1.6025	0.0193	0.7304	0.0294	0.7597	0.2103	0.0281	0.2384		2,073.7326	2,073.7326	0.0522	0.3058	2,166.1767
Worker	0.9267	0.4940	8.9360	0.0266	3.2751	0.0140	3.2891	0.8686	0.0129	0.8815		2,789.3438	2,789.3438	0.0526	0.0570	2,807.6523
<b>Total</b>	<b>1.0523</b>	<b>4.4744</b>	<b>10.5386</b>	<b>0.0459</b>	<b>4.0054</b>	<b>0.0434</b>	<b>4.0488</b>	<b>1.0789</b>	<b>0.0410</b>	<b>1.1199</b>		<b>4,863.0764</b>	<b>4,863.0764</b>	<b>0.1048</b>	<b>0.3629</b>	<b>4,973.8290</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1256	3.9804	1.6025	0.0193	0.6836	0.0294	0.7129	0.1988	0.0281	0.2269		2,073.7326	2,073.7326	0.0522	0.3058	2,166.1767
Worker	0.9267	0.4940	8.9360	0.0266	3.0188	0.0140	3.0328	0.8057	0.0129	0.8186		2,789.3438	2,789.3438	0.0526	0.0570	2,807.6523
<b>Total</b>	<b>1.0523</b>	<b>4.4744</b>	<b>10.5386</b>	<b>0.0459</b>	<b>3.7024</b>	<b>0.0434</b>	<b>3.7458</b>	<b>1.0045</b>	<b>0.0410</b>	<b>1.0455</b>		<b>4,863.0764</b>	<b>4,863.0764</b>	<b>0.1048</b>	<b>0.3629</b>	<b>4,973.8290</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.1237	3.9505	1.5840	0.0189	0.7303	0.0292	0.7595	0.2103	0.0279	0.2382	2,029.8758	2,029.8758	0.0505	0.2992	2,120.3105	
Worker	0.8682	0.4485	8.4114	0.0258	3.2751	0.0132	3.2882	0.8686	0.0121	0.8807	2,728.5092	2,728.5092	0.0478	0.0539	2,745.7689	
<b>Total</b>	<b>0.9919</b>	<b>4.3990</b>	<b>9.9954</b>	<b>0.0447</b>	<b>4.0054</b>	<b>0.0424</b>	<b>4.0478</b>	<b>1.0789</b>	<b>0.0401</b>	<b>1.1189</b>	<b>4,758.3850</b>	<b>4,758.3850</b>	<b>0.0983</b>	<b>0.3532</b>	<b>4,866.0794</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1237	3.9505	1.5840	0.0189	0.6835	0.0292	0.7127	0.1988	0.0279	0.2267	2,029.8758	2,029.8758	0.0505	0.2992	2,120.3105	
Worker	0.8682	0.4485	8.4114	0.0258	3.0188	0.0132	3.0320	0.8057	0.0121	0.8178	2,728.5092	2,728.5092	0.0478	0.0539	2,745.7689	

Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.9919	4.3990	9.9954	0.0447	3.7023	0.0424	3.7447	1.0045	0.0401	1.0445		4,758.3850	4,758.3850	0.0983	0.3532	4,866.0794
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3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0230	0.4306	1.3200e-003	0.1677	6.8000e-004	0.1683	0.0445	6.2000e-004	0.0451		139.6848	139.6848	2.4500e-003	2.7600e-003	140.5684
<b>Total</b>	<b>0.0445</b>	<b>0.0230</b>	<b>0.4306</b>	<b>1.3200e-003</b>	<b>0.1677</b>	<b>6.8000e-004</b>	<b>0.1683</b>	<b>0.0445</b>	<b>6.2000e-004</b>	<b>0.0451</b>		<b>139.6848</b>	<b>139.6848</b>	<b>2.4500e-003</b>	<b>2.7600e-003</b>	<b>140.5684</b>



Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0230	0.4306	1.3200e-003	0.1546	6.8000e-004	0.1552	0.0413	6.2000e-004	0.0419		139.6848	139.6848	2.4500e-003	2.7600e-003	140.5684
<b>Total</b>	<b>0.0445</b>	<b>0.0230</b>	<b>0.4306</b>	<b>1.3200e-003</b>	<b>0.1546</b>	<b>6.8000e-004</b>	<b>0.1552</b>	<b>0.0413</b>	<b>6.2000e-004</b>	<b>0.0419</b>		<b>139.6848</b>	<b>139.6848</b>	<b>2.4500e-003</b>	<b>2.7600e-003</b>	<b>140.5684</b>

**3.7 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	71.6358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>71.8066</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1748	0.0903	1.6938	5.1900e-003	0.6595	2.6600e-003	0.6621	0.1749	2.4400e-003	0.1773		549.4268	549.4268	9.6200e-003	0.0109	552.9023
<b>Total</b>	<b>0.1748</b>	<b>0.0903</b>	<b>1.6938</b>	<b>5.1900e-003</b>	<b>0.6595</b>	<b>2.6600e-003</b>	<b>0.6621</b>	<b>0.1749</b>	<b>2.4400e-003</b>	<b>0.1773</b>		<b>549.4268</b>	<b>549.4268</b>	<b>9.6200e-003</b>	<b>0.0109</b>	<b>552.9023</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.6358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Construction P1 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

<b>Total</b>	<b>71.8066</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1748	0.0903	1.6938	5.1900e-003	0.6079	2.6600e-003	0.6105	0.1622	2.4400e-003	0.1647		549.4268	549.4268	9.6200e-003	0.0109	552.9023
<b>Total</b>	<b>0.1748</b>	<b>0.0903</b>	<b>1.6938</b>	<b>5.1900e-003</b>	<b>0.6079</b>	<b>2.6600e-003</b>	<b>0.6105</b>	<b>0.1622</b>	<b>2.4400e-003</b>	<b>0.1647</b>		<b>549.4268</b>	<b>549.4268</b>	<b>9.6200e-003</b>	<b>0.0109</b>	<b>552.9023</b>

Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction P1**

**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	144.91	1000sqft	1.21	144,912.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2027

**Utility Company**

<b>CO2 Intensity (lb/MWhr)</b>	0	<b>CH4 Intensity (lb/MWhr)</b>	0	<b>N2O Intensity (lb/MWhr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information received from the College District.

Trips and VMT - See the Construction Phase 1 modeling assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Architectural Coating - Based on new propose parking lot areas.

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	33,124.00	19,284.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.33	1.21
tblTripsAndVMT	HaulingTripNumber	292.00	294.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00

Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	VendorTripNumber	0.00	16.00
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	2.9789	28.5684	27.0668	0.0704	19.9095	1.1360	20.9992	10.1706	1.0453	11.1732	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571
2027	71.9766	17.1138	24.6705	0.0693	4.0054	0.5700	4.5754	1.0789	0.5364	1.6153	0.0000	7,065.3370	7,065.3370	0.7162	0.3557	7,188.8301
Maximum	71.9766	28.5684	27.0668	0.0704	19.9095	1.1360	20.9992	10.1706	1.0453	11.1732	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	2.9789	28.5684	27.0668	0.0704	8.6368	1.1360	9.7265	4.3822	1.0453	5.3849	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571
2027	71.9766	17.1138	24.6705	0.0693	3.7023	0.5700	4.2724	1.0045	0.5364	1.5409	0.0000	7,065.3370	7,065.3370	0.7162	0.3557	7,188.8301
Maximum	71.9766	28.5684	27.0668	0.0704	8.6368	1.1360	9.7265	4.3822	1.0453	5.3849	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	48.40	0.00	45.26	52.12	0.00	45.84	0.00	0.00	0.00	0.00	0.00	0.00

Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	7/14/2027	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 12.68

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 217,368; Non-Residential Outdoor: 72,456; Striped Parking Area: 19,284

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Construction P1 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	294.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	293.00	114.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	59.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2026**

**Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					3.1585	0.0000	3.1585	0.4782	0.0000	0.4782			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606

Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	2.0926	19.1966	19.4184	0.0388	3.1585	0.8528	4.0113	0.4782	0.7920	1.2702		3,747.5996	3,747.5996	1.0464		3,773.7606
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0319	1.6750	0.5007	7.7800e-003	0.2574	0.0166	0.2740	0.0706	0.0159	0.0864		847.3517	847.3517	0.0350	0.1343	888.2464
Vendor	4.0800e-003	0.1475	0.0580	6.8000e-004	0.0256	1.0300e-003	0.0267	7.3800e-003	9.9000e-004	8.3700e-003		72.9434	72.9434	1.8200e-003	0.0108	76.1965
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
Total	0.0820	1.8491	0.9365	9.6900e-003	0.4507	0.0183	0.4690	0.1224	0.0175	0.1399		1,049.7511	1,049.7511	0.0396	0.1481	1,094.8640

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3503	0.0000	1.3503	0.2044	0.0000	0.2044			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	1.3503	0.8528	2.2030	0.2044	0.7920	0.9964	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606



Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0319	1.6750	0.5007	7.7800e-003	0.2399	0.0166	0.2565	0.0663	0.0159	0.0822		847.3517	847.3517	0.0350	0.1343	888.2464
Vendor	4.0800e-003	0.1475	0.0580	6.8000e-004	0.0240	1.0300e-003	0.0250	6.9800e-003	9.9000e-004	7.9700e-003		72.9434	72.9434	1.8200e-003	0.0108	76.1965
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1546	7.2000e-004	0.1553	0.0413	6.6000e-004	0.0419		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
<b>Total</b>	<b>0.0820</b>	<b>1.8491</b>	<b>0.9365</b>	<b>9.6900e-003</b>	<b>0.4185</b>	<b>0.0183</b>	<b>0.4368</b>	<b>0.1145</b>	<b>0.0175</b>	<b>0.1320</b>		<b>1,049.7511</b>	<b>1,049.7511</b>	<b>0.0396</b>	<b>0.1481</b>	<b>1,094.8640</b>

**3.3 Site Preparation - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
<b>Total</b>	<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>19.6570</b>	<b>1.0868</b>	<b>20.7438</b>	<b>10.1025</b>	<b>0.9999</b>	<b>11.1023</b>		<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>		<b>3,718.9320</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	8.1600e-003	0.2951	0.1160	1.3600e-003	0.0513	2.0700e-003	0.0533	0.0148	1.9800e-003	0.0167	145.8869	145.8869	3.6300e-003	0.0215	152.3930	
Worker	0.0552	0.0319	0.4534	1.4800e-003	0.2012	8.6000e-004	0.2021	0.0534	7.9000e-004	0.0542	155.3472	155.3472	3.2600e-003	3.6100e-003	156.5053	
<b>Total</b>	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.8400e-003</b>	<b>0.2525</b>	<b>2.9300e-003</b>	<b>0.2554</b>	<b>0.0681</b>	<b>2.7700e-003</b>	<b>0.0709</b>	<b>301.2341</b>	<b>301.2341</b>	<b>6.8900e-003</b>	<b>0.0251</b>	<b>308.8983</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
<b>Total</b>	<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>8.4034</b>	<b>1.0868</b>	<b>9.4902</b>	<b>4.3188</b>	<b>0.9999</b>	<b>5.3187</b>	<b>0.0000</b>	<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>		<b>3,718.9320</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	8.1600e-003	0.2951	0.1160	1.3600e-003	0.0480	2.0700e-003	0.0500	0.0140	1.9800e-003	0.0159		145.8869	145.8869	3.6300e-003	0.0215	152.3930

Construction P1 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0552	0.0319	0.4534	1.4800e-003	0.1855	8.6000e-004	0.1863	0.0495	7.9000e-004	0.0503		155.3472	155.3472	3.2600e-003	3.6100e-003	156.5053
<b>Total</b>	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.8400e-003</b>	<b>0.2334</b>	<b>2.9300e-003</b>	<b>0.2364</b>	<b>0.0634</b>	<b>2.7700e-003</b>	<b>0.0662</b>		<b>301.2341</b>	<b>301.2341</b>	<b>6.8900e-003</b>	<b>0.0251</b>	<b>308.8983</b>

**3.4 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>9.2036</b>	<b>1.1309</b>	<b>10.3345</b>	<b>3.6538</b>	<b>1.0404</b>	<b>4.6942</b>		<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.5901	0.2320	2.7200e-003	0.1025	4.1400e-003	0.1066	0.0295	3.9600e-003	0.0335		291.7738	291.7738	7.2600e-003	0.0431	304.7860
Worker	0.0614	0.0354	0.5037	1.6400e-003	0.2236	9.6000e-004	0.2245	0.0593	8.8000e-004	0.0602		172.6080	172.6080	3.6200e-003	4.0100e-003	173.8948
<b>Total</b>	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.3600e-003</b>	<b>0.3261</b>	<b>5.1000e-003</b>	<b>0.3312</b>	<b>0.0888</b>	<b>4.8400e-003</b>	<b>0.0936</b>		<b>464.3817</b>	<b>464.3817</b>	<b>0.0109</b>	<b>0.0471</b>	<b>478.6808</b>

Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9345	0.0000	3.9345	1.5620	0.0000	1.5620			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>3.9345</b>	<b>1.1309</b>	<b>5.0654</b>	<b>1.5620</b>	<b>1.0404</b>	<b>2.6024</b>	<b>0.0000</b>	<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.5901	0.2320	2.7200e-003	0.0959	4.1400e-003	0.1001	0.0279	3.9600e-003	0.0319		291.7738	291.7738	7.2600e-003	0.0431	304.7860
Worker	0.0614	0.0354	0.5037	1.6400e-003	0.2061	9.6000e-004	0.2070	0.0550	8.8000e-004	0.0559		172.6080	172.6080	3.6200e-003	4.0100e-003	173.8948
<b>Total</b>	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.3600e-003</b>	<b>0.3020</b>	<b>5.1000e-003</b>	<b>0.3071</b>	<b>0.0829</b>	<b>4.8400e-003</b>	<b>0.0877</b>		<b>464.3817</b>	<b>464.3817</b>	<b>0.0109</b>	<b>0.0471</b>	<b>478.6808</b>

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.2045	1.6529	0.0194	0.7304	0.0295	0.7598	0.2103	0.0282	0.2385		2,078.8880	2,078.8880	0.0518	0.3068	2,171.6005
Worker	0.8992	0.5189	7.3797	0.0241	3.2751	0.0140	3.2891	0.8686	0.0129	0.8815		2,528.7068	2,528.7068	0.0531	0.0588	2,547.5585
<b>Total</b>	<b>1.0154</b>	<b>4.7233</b>	<b>9.0326</b>	<b>0.0435</b>	<b>4.0054</b>	<b>0.0435</b>	<b>4.0489</b>	<b>1.0789</b>	<b>0.0411</b>	<b>1.1200</b>		<b>4,607.5948</b>	<b>4,607.5948</b>	<b>0.1048</b>	<b>0.3656</b>	<b>4,719.1590</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.2045	1.6529	0.0194	0.6836	0.0295	0.7130	0.1988	0.0282	0.2270		2,078.8880	2,078.8880	0.0518	0.3068	2,171.6005
Worker	0.8992	0.5189	7.3797	0.0241	3.0188	0.0140	3.0328	0.8057	0.0129	0.8186		2,528.7068	2,528.7068	0.0531	0.0588	2,547.5585
<b>Total</b>	<b>1.0154</b>	<b>4.7233</b>	<b>9.0326</b>	<b>0.0435</b>	<b>3.7024</b>	<b>0.0435</b>	<b>3.7459</b>	<b>1.0045</b>	<b>0.0411</b>	<b>1.0456</b>		<b>4,607.5948</b>	<b>4,607.5948</b>	<b>0.1048</b>	<b>0.3656</b>	<b>4,719.1590</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1143	4.1732	1.6340	0.0190	0.7303	0.0293	0.7596	0.2103	0.0280	0.2383	2,034.9648	2,034.9648	0.0500	0.3002	2,125.6623	
Worker	0.8442	0.4709	6.9518	0.0234	3.2751	0.0132	3.2882	0.8686	0.0121	0.8807	2,473.8978	2,473.8978	0.0483	0.0556	2,491.6697	
<b>Total</b>	<b>0.9585</b>	<b>4.6441</b>	<b>8.5858</b>	<b>0.0424</b>	<b>4.0054</b>	<b>0.0425</b>	<b>4.0479</b>	<b>1.0789</b>	<b>0.0402</b>	<b>1.1190</b>	<b>4,508.8626</b>	<b>4,508.8626</b>	<b>0.0983</b>	<b>0.3557</b>	<b>4,617.3320</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1143	4.1732	1.6340	0.0190	0.6835	0.0293	0.7128	0.1988	0.0280	0.2268		2,034.9648	2,034.9648	0.0500	0.3002	2,125.6623
Worker	0.8442	0.4709	6.9518	0.0234	3.0188	0.0132	3.0320	0.8057	0.0121	0.8178		2,473.8978	2,473.8978	0.0483	0.0556	2,491.6697

Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.9585	4.6441	8.5858	0.0424	3.7023	0.0425	3.7448	1.0045	0.0402	1.0446		4,508.8626	4,508.8626	0.0983	0.3557	4,617.3320
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3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0432	0.0241	0.3559	1.2000e-003	0.1677	6.8000e-004	0.1683	0.0445	6.2000e-004	0.0451		126.6501	126.6501	2.4700e-003	2.8500e-003	127.5599
<b>Total</b>	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.2000e-003</b>	<b>0.1677</b>	<b>6.8000e-004</b>	<b>0.1683</b>	<b>0.0445</b>	<b>6.2000e-004</b>	<b>0.0451</b>		<b>126.6501</b>	<b>126.6501</b>	<b>2.4700e-003</b>	<b>2.8500e-003</b>	<b>127.5599</b>



Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0432	0.0241	0.3559	1.2000e-003	0.1546	6.8000e-004	0.1552	0.0413	6.2000e-004	0.0419		126.6501	126.6501	2.4700e-003	2.8500e-003	127.5599
<b>Total</b>	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.2000e-003</b>	<b>0.1546</b>	<b>6.8000e-004</b>	<b>0.1552</b>	<b>0.0413</b>	<b>6.2000e-004</b>	<b>0.0419</b>		<b>126.6501</b>	<b>126.6501</b>	<b>2.4700e-003</b>	<b>2.8500e-003</b>	<b>127.5599</b>

**3.7 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	71.6358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>71.8066</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1700	0.0948	1.3999	4.7100e-003	0.6595	2.6600e-003	0.6621	0.1749	2.4400e-003	0.1773		498.1569	498.1569	9.7300e-003	0.0112	501.7355
<b>Total</b>	<b>0.1700</b>	<b>0.0948</b>	<b>1.3999</b>	<b>4.7100e-003</b>	<b>0.6595</b>	<b>2.6600e-003</b>	<b>0.6621</b>	<b>0.1749</b>	<b>2.4400e-003</b>	<b>0.1773</b>		<b>498.1569</b>	<b>498.1569</b>	<b>9.7300e-003</b>	<b>0.0112</b>	<b>501.7355</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.6358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Construction P1 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

<b>Total</b>	<b>71.8066</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1700	0.0948	1.3999	4.7100e-003	0.6079	2.6600e-003	0.6105	0.1622	2.4400e-003	0.1647		498.1569	498.1569	9.7300e-003	0.0112	501.7355
<b>Total</b>	<b>0.1700</b>	<b>0.0948</b>	<b>1.3999</b>	<b>4.7100e-003</b>	<b>0.6079</b>	<b>2.6600e-003</b>	<b>0.6105</b>	<b>0.1622</b>	<b>2.4400e-003</b>	<b>0.1647</b>		<b>498.1569</b>	<b>498.1569</b>	<b>9.7300e-003</b>	<b>0.0112</b>	<b>501.7355</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P1**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	144.91	1000sqft	1.21	144,912.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2027

**Utility Company**

<b>CO2 Intensity (lb/MWhr)</b>	0	<b>CH4 Intensity (lb/MWhr)</b>	0	<b>N2O Intensity (lb/MWhr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information received from the College District.

Trips and VMT - See the Construction Phase 1 modeling assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Architectural Coating - Based on new propose parking lot areas.

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	33,124.00	19,284.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.33	1.21
tblTripsAndVMT	HaulingTripNumber	292.00	294.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00

**Construction P1 - San Bernardino-South Coast County, Annual**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction**  
**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.3118	2.4954	3.2597	8.8100e-003	0.6735	0.0886	0.7621	0.2196	0.0828	0.3023	0.0000	807.2010	807.2010	0.1063	0.0356	820.4570
2027	0.8578	0.9458	1.4187	3.7700e-003	0.2027	0.0330	0.2357	0.0547	0.0310	0.0856	0.0000	347.6788	347.6788	0.0382	0.0162	353.4508
<b>Maximum</b>	<b>0.8578</b>	<b>2.4954</b>	<b>3.2597</b>	<b>8.8100e-003</b>	<b>0.6735</b>	<b>0.0886</b>	<b>0.7621</b>	<b>0.2196</b>	<b>0.0828</b>	<b>0.3023</b>	<b>0.0000</b>	<b>807.2010</b>	<b>807.2010</b>	<b>0.1063</b>	<b>0.0356</b>	<b>820.4570</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.3118	2.4954	3.2597	8.8100e-003	0.4896	0.0886	0.5782	0.1490	0.0828	0.2318	0.0000	807.2005	807.2005	0.1063	0.0356	820.4565
2027	0.8578	0.9458	1.4187	3.7700e-003	0.1874	0.0330	0.2204	0.0509	0.0310	0.0819	0.0000	347.6786	347.6786	0.0382	0.0162	353.4506
<b>Maximum</b>	<b>0.8578</b>	<b>2.4954</b>	<b>3.2597</b>	<b>8.8100e-003</b>	<b>0.4896</b>	<b>0.0886</b>	<b>0.5782</b>	<b>0.1490</b>	<b>0.0828</b>	<b>0.2318</b>	<b>0.0000</b>	<b>807.2005</b>	<b>807.2005</b>	<b>0.1063</b>	<b>0.0356</b>	<b>820.4565</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>22.74</b>	<b>0.01</b>	<b>19.97</b>	<b>27.09</b>	<b>0.00</b>	<b>19.15</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction P1 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2026	3-31-2026	0.8878	0.8878
2	4-1-2026	6-30-2026	0.6293	0.6293
3	7-1-2026	9-30-2026	0.6362	0.6362
4	10-1-2026	12-31-2026	0.6432	0.6432
5	1-1-2027	3-31-2027	0.6248	0.6248
6	4-1-2027	6-30-2027	0.8148	0.8148
7	7-1-2027	9-30-2027	0.3661	0.3661
		Highest	0.8878	0.8878

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	7/14/2027	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 12.68

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 217,368; Non-Residential Outdoor: 72,456; Striped Parking Area: 19,284

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	294.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	293.00	114.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	59.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0316	0.0000	0.0316	4.7800e-003	0.0000	4.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9977	33.9977	9.4900e-003	0.0000	34.2350
<b>Total</b>	<b>0.0209</b>	<b>0.1920</b>	<b>0.1942</b>	<b>3.9000e-004</b>	<b>0.0316</b>	<b>8.5300e-003</b>	<b>0.0401</b>	<b>4.7800e-003</b>	<b>7.9200e-003</b>	<b>0.0127</b>	<b>0.0000</b>	<b>33.9977</b>	<b>33.9977</b>	<b>9.4900e-003</b>	<b>0.0000</b>	<b>34.2350</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3000e-004	0.0168	4.9600e-003	8.0000e-005	2.5300e-003	1.7000e-004	2.7000e-003	7.0000e-004	1.6000e-004	8.5000e-004	0.0000	7.6802	7.6802	3.2000e-004	1.2200e-003	8.0509
Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	4.2000e-004	2.8000e-004	3.9600e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.1975	1.1975	2.0000e-005	3.0000e-005	1.2066
<b>Total</b>	<b>7.9000e-004</b>	<b>0.0186</b>	<b>9.4900e-003</b>	<b>1.0000e-004</b>	<b>4.4200e-003</b>	<b>1.9000e-004</b>	<b>4.6100e-003</b>	<b>1.2100e-003</b>	<b>1.8000e-004</b>	<b>1.3700e-003</b>	<b>0.0000</b>	<b>9.5385</b>	<b>9.5385</b>	<b>3.6000e-004</b>	<b>1.3500e-003</b>	<b>9.9477</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0135	0.0000	0.0135	2.0400e-003	0.0000	2.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9976	33.9976	9.4900e-003	0.0000	34.2349
<b>Total</b>	<b>0.0209</b>	<b>0.1920</b>	<b>0.1942</b>	<b>3.9000e-004</b>	<b>0.0135</b>	<b>8.5300e-003</b>	<b>0.0220</b>	<b>2.0400e-003</b>	<b>7.9200e-003</b>	<b>9.9600e-003</b>	<b>0.0000</b>	<b>33.9976</b>	<b>33.9976</b>	<b>9.4900e-003</b>	<b>0.0000</b>	<b>34.2349</b>



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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3000e-004	0.0168	4.9600e-003	8.0000e-005	2.3600e-003	1.7000e-004	2.5300e-003	6.5000e-004	1.6000e-004	8.1000e-004	0.0000	7.6802	7.6802	3.2000e-004	1.2200e-003	8.0509
Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	4.2000e-004	2.8000e-004	3.9600e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5200e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1975	1.1975	2.0000e-005	3.0000e-005	1.2066
<b>Total</b>	<b>7.9000e-004</b>	<b>0.0186</b>	<b>9.4900e-003</b>	<b>1.0000e-004</b>	<b>4.1200e-003</b>	<b>1.9000e-004</b>	<b>4.3000e-003</b>	<b>1.1300e-003</b>	<b>1.8000e-004</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>9.5385</b>	<b>9.5385</b>	<b>3.6000e-004</b>	<b>1.3500e-003</b>	<b>9.9477</b>

**3.3 Site Preparation - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
<b>Total</b>	<b>0.0124</b>	<b>0.1262</b>	<b>0.0896</b>	<b>1.9000e-004</b>	<b>0.0983</b>	<b>5.4300e-003</b>	<b>0.1037</b>	<b>0.0505</b>	<b>5.0000e-003</b>	<b>0.0555</b>	<b>0.0000</b>	<b>16.7335</b>	<b>16.7335</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8688</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	2.5000e-004	1.7000e-004	2.3800e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7185	0.7185	1.0000e-005	2.0000e-005	0.7239
<b>Total</b>	<b>2.9000e-004</b>	<b>1.6400e-003</b>	<b>2.9500e-003</b>	<b>2.0000e-005</b>	<b>1.2400e-003</b>	<b>1.0000e-005</b>	<b>1.2500e-003</b>	<b>3.3000e-004</b>	<b>1.0000e-005</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>1.3793</b>	<b>1.3793</b>	<b>3.0000e-005</b>	<b>1.2000e-004</b>	<b>1.4142</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0420	0.0000	0.0420	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
<b>Total</b>	<b>0.0124</b>	<b>0.1262</b>	<b>0.0896</b>	<b>1.9000e-004</b>	<b>0.0420</b>	<b>5.4300e-003</b>	<b>0.0475</b>	<b>0.0216</b>	<b>5.0000e-003</b>	<b>0.0266</b>	<b>0.0000</b>	<b>16.7335</b>	<b>16.7335</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8688</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	2.5000e-004	1.7000e-004	2.3800e-003	1.0000e-005	9.1000e-004	0.0000	9.1000e-004	2.4000e-004	0.0000	2.5000e-004	0.0000	0.7185	0.7185	1.0000e-005	2.0000e-005	0.7239
<b>Total</b>	<b>2.9000e-004</b>	<b>1.6400e-003</b>	<b>2.9500e-003</b>	<b>2.0000e-005</b>	<b>1.1500e-003</b>	<b>1.0000e-005</b>	<b>1.1600e-003</b>	<b>3.1000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.3793</b>	<b>1.3793</b>	<b>3.0000e-005</b>	<b>1.2000e-004</b>	<b>1.4142</b>

**3.4 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4191	0.3950	9.3000e-004		0.0170	0.0170		0.0156	0.0156	0.0000	81.7593	81.7593	0.0264	0.0000	82.4204
<b>Total</b>	<b>0.0435</b>	<b>0.4191</b>	<b>0.3950</b>	<b>9.3000e-004</b>	<b>0.1381</b>	<b>0.0170</b>	<b>0.1550</b>	<b>0.0548</b>	<b>0.0156</b>	<b>0.0704</b>	<b>0.0000</b>	<b>81.7593</b>	<b>81.7593</b>	<b>0.0264</b>	<b>0.0000</b>	<b>82.4204</b>

**Construction P1 - San Bernardino-South Coast County, Annual**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	8.8100e-003	3.4200e-003	4.0000e-005	1.5100e-003	6.0000e-005	1.5800e-003	4.4000e-004	6.0000e-005	5.0000e-004	0.0000	3.9647	3.9647	1.0000e-004	5.9000e-004	4.1415
Worker	8.5000e-004	5.6000e-004	7.9200e-003	3.0000e-005	3.2900e-003	1.0000e-005	3.3000e-003	8.7000e-004	1.0000e-005	8.9000e-004	0.0000	2.3951	2.3951	5.0000e-005	6.0000e-005	2.4131
<b>Total</b>	<b>1.1000e-003</b>	<b>9.3700e-003</b>	<b>0.0113</b>	<b>7.0000e-005</b>	<b>4.8000e-003</b>	<b>7.0000e-005</b>	<b>4.8800e-003</b>	<b>1.3100e-003</b>	<b>7.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>6.3598</b>	<b>6.3598</b>	<b>1.5000e-004</b>	<b>6.5000e-004</b>	<b>6.5547</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0590	0.0000	0.0590	0.0234	0.0000	0.0234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4191	0.3950	9.3000e-004		0.0170	0.0170		0.0156	0.0156	0.0000	81.7592	81.7592	0.0264	0.0000	82.4203
<b>Total</b>	<b>0.0435</b>	<b>0.4191</b>	<b>0.3950</b>	<b>9.3000e-004</b>	<b>0.0590</b>	<b>0.0170</b>	<b>0.0760</b>	<b>0.0234</b>	<b>0.0156</b>	<b>0.0390</b>	<b>0.0000</b>	<b>81.7592</b>	<b>81.7592</b>	<b>0.0264</b>	<b>0.0000</b>	<b>82.4203</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	8.8100e-003	3.4200e-003	4.0000e-005	1.4200e-003	6.0000e-005	1.4800e-003	4.1000e-004	6.0000e-005	4.7000e-004	0.0000	3.9647	3.9647	1.0000e-004	5.9000e-004	4.1415
Worker	8.5000e-004	5.6000e-004	7.9200e-003	3.0000e-005	3.0300e-003	1.0000e-005	3.0500e-003	8.1000e-004	1.0000e-005	8.2000e-004	0.0000	2.3951	2.3951	5.0000e-005	6.0000e-005	2.4131
<b>Total</b>	<b>1.1000e-003</b>	<b>9.3700e-003</b>	<b>0.0113</b>	<b>7.0000e-005</b>	<b>4.4500e-003</b>	<b>7.0000e-005</b>	<b>4.5300e-003</b>	<b>1.2200e-003</b>	<b>7.0000e-005</b>	<b>1.2900e-003</b>	<b>0.0000</b>	<b>6.3598</b>	<b>6.3598</b>	<b>1.5000e-004</b>	<b>6.5000e-004</b>	<b>6.5547</b>

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0791	233.0791	0.0548	0.0000	234.4488
<b>Total</b>	<b>0.1374</b>	<b>1.2532</b>	<b>1.6165</b>	<b>2.7100e-003</b>		<b>0.0530</b>	<b>0.0530</b>		<b>0.0499</b>	<b>0.0499</b>	<b>0.0000</b>	<b>233.0791</b>	<b>233.0791</b>	<b>0.0548</b>	<b>0.0000</b>	<b>234.4488</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.4207	0.1635	1.9500e-003	0.0723	2.9600e-003	0.0752	0.0209	2.8300e-003	0.0237	0.0000	189.2644	189.2644	4.7400e-003	0.0279	197.7061
Worker	0.0832	0.0546	0.7773	2.4700e-003	0.3229	1.4100e-003	0.3243	0.0858	1.3000e-003	0.0871	0.0000	235.0895	235.0895	4.9000e-003	5.5300e-003	236.8614
<b>Total</b>	<b>0.0954</b>	<b>0.4754</b>	<b>0.9408</b>	<b>4.4200e-003</b>	<b>0.3951</b>	<b>4.3700e-003</b>	<b>0.3995</b>	<b>0.1066</b>	<b>4.1300e-003</b>	<b>0.1107</b>	<b>0.0000</b>	<b>424.3539</b>	<b>424.3539</b>	<b>9.6400e-003</b>	<b>0.0335</b>	<b>434.5675</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0788	233.0788	0.0548	0.0000	234.4485
<b>Total</b>	<b>0.1374</b>	<b>1.2532</b>	<b>1.6165</b>	<b>2.7100e-003</b>		<b>0.0530</b>	<b>0.0530</b>		<b>0.0499</b>	<b>0.0499</b>	<b>0.0000</b>	<b>233.0788</b>	<b>233.0788</b>	<b>0.0548</b>	<b>0.0000</b>	<b>234.4485</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.4207	0.1635	1.9500e-003	0.0677	2.9600e-003	0.0706	0.0197	2.8300e-003	0.0226	0.0000	189.2644	189.2644	4.7400e-003	0.0279	197.7061
Worker	0.0832	0.0546	0.7773	2.4700e-003	0.2977	1.4100e-003	0.2991	0.0796	1.3000e-003	0.0809	0.0000	235.0895	235.0895	4.9000e-003	5.5300e-003	236.8614
<b>Total</b>	<b>0.0954</b>	<b>0.4754</b>	<b>0.9408</b>	<b>4.4200e-003</b>	<b>0.3653</b>	<b>4.3700e-003</b>	<b>0.3697</b>	<b>0.0993</b>	<b>4.1300e-003</b>	<b>0.1034</b>	<b>0.0000</b>	<b>424.3539</b>	<b>424.3539</b>	<b>9.6400e-003</b>	<b>0.0335</b>	<b>434.5675</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8001	114.8001	0.0270	0.0000	115.4748
<b>Total</b>	<b>0.0677</b>	<b>0.6173</b>	<b>0.7962</b>	<b>1.3300e-003</b>		<b>0.0261</b>	<b>0.0261</b>		<b>0.0246</b>	<b>0.0246</b>	<b>0.0000</b>	<b>114.8001</b>	<b>114.8001</b>	<b>0.0270</b>	<b>0.0000</b>	<b>115.4748</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-003	0.2057	0.0796	9.4000e-004	0.0356	1.4500e-003	0.0370	0.0103	1.3800e-003	0.0117	0.0000	91.2491	91.2491	2.2600e-003	0.0135	95.3165
Worker	0.0384	0.0244	0.3606	1.1800e-003	0.1590	6.5000e-004	0.1597	0.0422	6.0000e-004	0.0428	0.0000	113.2774	113.2774	2.2000e-003	2.5800e-003	114.1000
<b>Total</b>	<b>0.0443</b>	<b>0.2301</b>	<b>0.4402</b>	<b>2.1200e-003</b>	<b>0.1946</b>	<b>2.1000e-003</b>	<b>0.1967</b>	<b>0.0525</b>	<b>1.9800e-003</b>	<b>0.0545</b>	<b>0.0000</b>	<b>204.5265</b>	<b>204.5265</b>	<b>4.4600e-003</b>	<b>0.0160</b>	<b>209.4165</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8000	114.8000	0.0270	0.0000	115.4746
<b>Total</b>	<b>0.0677</b>	<b>0.6173</b>	<b>0.7962</b>	<b>1.3300e-003</b>		<b>0.0261</b>	<b>0.0261</b>		<b>0.0246</b>	<b>0.0246</b>	<b>0.0000</b>	<b>114.8000</b>	<b>114.8000</b>	<b>0.0270</b>	<b>0.0000</b>	<b>115.4746</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-003	0.2057	0.0796	9.4000e-004	0.0333	1.4500e-003	0.0348	9.7200e-003	1.3800e-003	0.0111	0.0000	91.2491	91.2491	2.2600e-003	0.0135	95.3165
Worker	0.0384	0.0244	0.3606	1.1800e-003	0.1466	6.5000e-004	0.1473	0.0392	6.0000e-004	0.0398	0.0000	113.2774	113.2774	2.2000e-003	2.5800e-003	114.1000
<b>Total</b>	<b>0.0443</b>	<b>0.2301</b>	<b>0.4402</b>	<b>2.1200e-003</b>	<b>0.1799</b>	<b>2.1000e-003</b>	<b>0.1820</b>	<b>0.0489</b>	<b>1.9800e-003</b>	<b>0.0509</b>	<b>0.0000</b>	<b>204.5265</b>	<b>204.5265</b>	<b>4.4600e-003</b>	<b>0.0160</b>	<b>209.4165</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2027

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
Paving	0.0166					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0258</b>	<b>0.0858</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>20.0193</b>	<b>20.0193</b>	<b>6.4700e-003</b>	<b>0.0000</b>	<b>20.1811</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.7300e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.1716	1.1716	2.0000e-005	3.0000e-005	1.1801
<b>Total</b>	<b>4.0000e-004</b>	<b>2.5000e-004</b>	<b>3.7300e-003</b>	<b>1.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6500e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>1.1716</b>	<b>1.1716</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>1.1801</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811
Paving	0.0166					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0258</b>	<b>0.0858</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>20.0192</b>	<b>20.0192</b>	<b>6.4700e-003</b>	<b>0.0000</b>	<b>20.1811</b>

Construction P1 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.7300e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5200e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1716	1.1716	2.0000e-005	3.0000e-005	1.1801
<b>Total</b>	<b>4.0000e-004</b>	<b>2.5000e-004</b>	<b>3.7300e-003</b>	<b>1.0000e-005</b>	<b>1.5200e-003</b>	<b>1.0000e-005</b>	<b>1.5200e-003</b>	<b>4.1000e-004</b>	<b>1.0000e-005</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.1716</b>	<b>1.1716</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>1.1801</b>

**3.7 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7164					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
<b>Total</b>	<b>0.7181</b>	<b>0.0115</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.5567</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.9000e-004	0.0147	5.0000e-005	6.4700e-003	3.0000e-005	6.5000e-003	1.7200e-003	2.0000e-005	1.7400e-003	0.0000	4.6081	4.6081	9.0000e-005	1.0000e-004	4.6416
<b>Total</b>	<b>1.5600e-003</b>	<b>9.9000e-004</b>	<b>0.0147</b>	<b>5.0000e-005</b>	<b>6.4700e-003</b>	<b>3.0000e-005</b>	<b>6.5000e-003</b>	<b>1.7200e-003</b>	<b>2.0000e-005</b>	<b>1.7400e-003</b>	<b>0.0000</b>	<b>4.6081</b>	<b>4.6081</b>	<b>9.0000e-005</b>	<b>1.0000e-004</b>	<b>4.6416</b>



**Construction P1 - San Bernardino-South Coast County, Annual**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7164					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
<b>Total</b>	<b>0.7181</b>	<b>0.0115</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.5567</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.9000e-004	0.0147	5.0000e-005	5.9600e-003	3.0000e-005	5.9900e-003	1.5900e-003	2.0000e-005	1.6200e-003	0.0000	4.6081	4.6081	9.0000e-005	1.0000e-004	4.6416
<b>Total</b>	<b>1.5600e-003</b>	<b>9.9000e-004</b>	<b>0.0147</b>	<b>5.0000e-005</b>	<b>5.9600e-003</b>	<b>3.0000e-005</b>	<b>5.9900e-003</b>	<b>1.5900e-003</b>	<b>2.0000e-005</b>	<b>1.6200e-003</b>	<b>0.0000</b>	<b>4.6081</b>	<b>4.6081</b>	<b>9.0000e-005</b>	<b>1.0000e-004</b>	<b>4.6416</b>

**Construction P1**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	5	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

**Construction P1**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	1.71000E-003	1.14600E-002	1.80900E-002	3.00000E-005	5.20000E-004	5.20000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.40000E-004	0.00000E+000	2.55674E+000
Concrete/Industrial Saws	2.95000E-003	2.26900E-002	3.64500E-002	6.00000E-005	9.30000E-004	9.30000E-004	0.00000E+000	5.37657E+000	5.37657E+000	2.40000E-004	0.00000E+000	5.38248E+000
Cranes	4.10600E-002	4.15790E-001	2.27910E-001	7.60000E-004	1.76700E-002	1.62600E-002	0.00000E+000	6.65383E+001	6.65383E+001	2.15200E-002	0.00000E+000	6.70763E+001
Excavators	1.00300E-002	7.33000E-002	1.95560E-001	3.10000E-004	3.59000E-003	3.31000E-003	0.00000E+000	2.72339E+001	2.72339E+001	8.81000E-003	0.00000E+000	2.74541E+001
Forklifts	3.91000E-002	3.68340E-001	5.10190E-001	6.90000E-004	1.97200E-002	1.81400E-002	0.00000E+000	6.04311E+001	6.04311E+001	1.95400E-002	0.00000E+000	6.09197E+001
Generator Sets	3.99600E-002	3.59320E-001	5.48920E-001	9.90000E-004	1.43100E-002	1.43100E-002	0.00000E+000	8.47811E+001	8.47811E+001	3.13000E-003	0.00000E+000	8.48594E+001
Graders	4.67000E-003	5.18500E-002	2.39100E-002	1.00000E-004	1.67000E-003	1.54000E-003	0.00000E+000	8.71223E+000	8.71223E+000	2.82000E-003	0.00000E+000	8.78268E+000
Pavers	3.48000E-003	3.16600E-002	5.79200E-002	9.00000E-005	1.48000E-003	1.36000E-003	0.00000E+000	8.25526E+000	8.25526E+000	2.67000E-003	0.00000E+000	8.32201E+000
Paving Equipment	2.94000E-003	2.52900E-002	5.09300E-002	8.00000E-005	1.25000E-003	1.15000E-003	0.00000E+000	7.15437E+000	7.15437E+000	2.31000E-003	0.00000E+000	7.21222E+000
Rollers	2.74000E-003	2.88600E-002	3.69300E-002	5.00000E-005	1.45000E-003	1.34000E-003	0.00000E+000	4.60962E+000	4.60962E+000	1.49000E-003	0.00000E+000	4.64689E+000
Rubber Tired Dozers	3.24000E-002	3.31560E-001	1.49890E-001	4.30000E-004	1.45100E-002	1.33500E-002	0.00000E+000	3.75103E+001	3.75103E+001	1.21300E-002	0.00000E+000	3.78138E+001
Scrapers	2.01500E-002	1.91120E-001	1.61420E-001	4.50000E-004	7.52000E-003	6.92000E-003	0.00000E+000	3.99564E+001	3.99564E+001	1.29200E-002	0.00000E+000	4.02795E+001
Tractors/Loaders/Bulldozers	5.86300E-002	5.92450E-001	9.89410E-001	1.38000E-003	2.40100E-002	2.20900E-002	0.00000E+000	1.21597E+002	1.21597E+002	3.93300E-002	0.00000E+000	1.22580E+002
Welders	3.29700E-002	2.01310E-001	2.47750E-001	3.80000E-004	6.13000E-003	6.13000E-003	0.00000E+000	2.82331E+001	2.82331E+001	2.68000E-003	0.00000E+000	2.83002E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr						Mitigated mt/yr						
Air Compressors	1.71000E-003	1.14600E-002	1.80900E-002	3.00000E-005	5.20000E-004	5.20000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.40000E-004	0.00000E+000	2.55673E+000
Concrete/Industrial Saws	2.95000E-003	2.26900E-002	3.64500E-002	6.00000E-005	9.30000E-004	9.30000E-004	0.00000E+000	5.37657E+000	5.37657E+000	2.40000E-004	0.00000E+000	5.38248E+000
Cranes	4.10600E-002	4.15790E-001	2.27910E-001	7.60000E-004	1.76700E-002	1.62600E-002	0.00000E+000	6.65382E+001	6.65382E+001	2.15200E-002	0.00000E+000	6.70762E+001
Excavators	1.00300E-002	7.33000E-002	1.95560E-001	3.10000E-004	3.59000E-003	3.31000E-003	0.00000E+000	2.72339E+001	2.72339E+001	8.81000E-003	0.00000E+000	2.74541E+001
Forklifts	3.91000E-002	3.68340E-001	5.10190E-001	6.90000E-004	1.97200E-002	1.81400E-002	0.00000E+000	6.04310E+001	6.04310E+001	1.95400E-002	0.00000E+000	6.09196E+001
Generator Sets	3.99600E-002	3.59320E-001	5.48920E-001	9.90000E-004	1.43100E-002	1.43100E-002	0.00000E+000	8.47810E+001	8.47810E+001	3.13000E-003	0.00000E+000	8.48593E+001
Graders	4.67000E-003	5.18500E-002	2.39100E-002	1.00000E-004	1.67000E-003	1.54000E-003	0.00000E+000	8.71222E+000	8.71222E+000	2.82000E-003	0.00000E+000	8.78267E+000
Pavers	3.48000E-003	3.16600E-002	5.79200E-002	9.00000E-005	1.48000E-003	1.36000E-003	0.00000E+000	8.25525E+000	8.25525E+000	2.67000E-003	0.00000E+000	8.32200E+000
Paving Equipment	2.94000E-003	2.52900E-002	5.09300E-002	8.00000E-005	1.25000E-003	1.15000E-003	0.00000E+000	7.15437E+000	7.15437E+000	2.31000E-003	0.00000E+000	7.21221E+000

**Construction P1**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Rollers	2.74000E-003	2.88600E-002	3.69300E-002	5.00000E-005	1.45000E-003	1.34000E-003	0.00000E+000	4.60962E+000	4.60962E+000	1.49000E-003	0.00000E+000	4.64689E+000
Rubber Tired Dozers	3.24000E-002	3.31560E-001	1.49890E-001	4.30000E-004	1.45100E-002	1.33500E-002	0.00000E+000	3.75102E+001	3.75102E+001	1.21300E-002	0.00000E+000	3.78135E+001
Scrapers	2.01500E-002	1.91120E-001	1.61420E-001	4.50000E-004	7.52000E-003	6.92000E-003	0.00000E+000	3.99564E+001	3.99564E+001	1.29200E-002	0.00000E+000	4.02794E+001
Tractors/Loaders/Bac hoes	5.86300E-002	5.92450E-001	9.89410E-001	1.38000E-003	2.40100E-002	2.20900E-002	0.00000E+000	1.21596E+002	1.21596E+002	3.93300E-002	0.00000E+000	1.22580E+002
Welders	3.29700E-002	2.01310E-001	2.47750E-001	3.80000E-004	6.13000E-003	6.13000E-003	0.00000E+000	2.82331E+001	2.82331E+001	2.68000E-003	0.00000E+000	2.83001E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.91123E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85788E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20231E-006	1.20231E-006	0.00000E+000	0.00000E+000	1.19267E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10157E-006	1.10157E-006	0.00000E+000	0.00000E+000	1.09273E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15834E-006	1.15834E-006	0.00000E+000	0.00000E+000	1.31320E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17842E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14781E-006	1.14781E-006	0.00000E+000	0.00000E+000	1.13860E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21135E-006	1.21135E-006	0.00000E+000	0.00000E+000	1.20163E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.38654E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33297E-006	1.33297E-006	0.00000E+000	0.00000E+000	1.32228E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25136E-006	1.25136E-006	0.00000E+000	0.00000E+000	1.24133E-006
Tractors/Loaders/Bac hoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23359E-006	1.23359E-006	0.00000E+000	0.00000E+000	1.22369E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06258E-006	1.06258E-006	0.00000E+000	0.00000E+000	1.06006E-006

**Construction P1**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input		
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00	
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day) 2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00	
Yes	Clean Paved Road	% PM Reduction	9.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.08	0.08
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.59	0.16	0.55	0.15	0.08	0.07
Demolition	Fugitive Dust	0.03	0.00	0.01	0.00	0.57	0.57
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Grading	Fugitive Dust	0.14	0.05	0.06	0.02	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Site Preparation	Fugitive Dust	0.10	0.05	0.04	0.02	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.07	0.06

# CalEEMod Output: Phase 1 Construction – Mitigated

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Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P1 - Mitigated**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	144.91	1000sqft	1.21	144,912.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2027

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information received from the College District.

Trips and VMT - See the Construction Phase 1 modeling assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Architectural Coating - Based on new propose parking lot areas. Includes mitigation.

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186. Mitigation for Tier 4 Interim

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	33,124.00	19,284.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00



Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblLandUse	LotAcreage	3.33	1.21
tblTripsAndVMT	HaulingTripNumber	292.00	294.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	2.9789	28.5684	27.0668	0.0704	19.9095	1.1360	20.9992	10.1706	1.0453	11.1732	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571
2027	26.6391	17.1138	24.6705	0.0693	4.0054	0.5700	4.5754	1.0789	0.5364	1.6153	0.0000	7,065.3370	7,065.3370	0.7162	0.3557	7,188.8301
<b>Maximum</b>	<b>26.6391</b>	<b>28.5684</b>	<b>27.0668</b>	<b>0.0704</b>	<b>19.9095</b>	<b>1.1360</b>	<b>20.9992</b>	<b>10.1706</b>	<b>1.0453</b>	<b>11.1732</b>	<b>0.0000</b>	<b>7,164.0692</b>	<b>7,164.0692</b>	<b>1.9541</b>	<b>0.3656</b>	<b>7,290.6571</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Year	lb/day										lb/day					
2026	2.2188	19.8962	37.4583	0.0704	7.5164	0.4424	7.5814	3.8064	0.4200	3.8713	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571
2027	26.6391	17.1650	24.9656	0.0693	3.7023	0.4413	4.1437	1.0045	0.4191	1.4235	0.0000	7,065.3370	7,065.3370	0.7162	0.3557	7,188.8301
Maximum	26.6391	19.8962	37.4583	0.0704	7.5164	0.4424	7.5814	3.8064	0.4200	3.8713	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.57	18.87	-20.66	0.00	53.09	48.20	54.15	57.23	46.95	58.60	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	7/14/2027	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 12.68

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 217,368; Non-Residential Outdoor: 72,456; Striped Parking Area: 19,284

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	294.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	293.00	114.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	59.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Cleaner Engines for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Clean Paved Roads

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1585	0.0000	3.1585	0.4782	0.0000	0.4782			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606
<b>Total</b>	<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>	<b>3.1585</b>	<b>0.8528</b>	<b>4.0113</b>	<b>0.4782</b>	<b>0.7920</b>	<b>1.2702</b>		<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0319	1.6750	0.5007	7.7800e-003	0.2574	0.0166	0.2740	0.0706	0.0159	0.0864		847.3517	847.3517	0.0350	0.1343	888.2464
Vendor	4.0800e-003	0.1475	0.0580	6.8000e-004	0.0256	1.0300e-003	0.0267	7.3800e-003	9.9000e-004	8.3700e-003		72.9434	72.9434	1.8200e-003	0.0108	76.1965
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
<b>Total</b>	<b>0.0820</b>	<b>1.8491</b>	<b>0.9365</b>	<b>9.6900e-003</b>	<b>0.4507</b>	<b>0.0183</b>	<b>0.4690</b>	<b>0.1224</b>	<b>0.0175</b>	<b>0.1399</b>		<b>1,049.7511</b>	<b>1,049.7511</b>	<b>0.0396</b>	<b>0.1481</b>	<b>1,094.8640</b>

Mitigated Construction On-Site

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1702	0.0000	1.1702	0.1772	0.0000	0.1772			0.0000			0.0000
Off-Road	0.7646	13.5951	24.4601	0.0388		0.1461	0.1461		0.1461	0.1461	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
<b>Total</b>	<b>0.7646</b>	<b>13.5951</b>	<b>24.4601</b>	<b>0.0388</b>	<b>1.1702</b>	<b>0.1461</b>	<b>1.3163</b>	<b>0.1772</b>	<b>0.1461</b>	<b>0.3233</b>	<b>0.0000</b>	<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0319	1.6750	0.5007	7.7800e-003	0.2399	0.0166	0.2565	0.0663	0.0159	0.0822		847.3517	847.3517	0.0350	0.1343	888.2464
Vendor	4.0800e-003	0.1475	0.0580	6.8000e-004	0.0240	1.0300e-003	0.0250	6.9800e-003	9.9000e-004	7.9700e-003		72.9434	72.9434	1.8200e-003	0.0108	76.1965
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1546	7.2000e-004	0.1553	0.0413	6.6000e-004	0.0419		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
<b>Total</b>	<b>0.0820</b>	<b>1.8491</b>	<b>0.9365</b>	<b>9.6900e-003</b>	<b>0.4185</b>	<b>0.0183</b>	<b>0.4368</b>	<b>0.1145</b>	<b>0.0175</b>	<b>0.1320</b>		<b>1,049.7511</b>	<b>1,049.7511</b>	<b>0.0396</b>	<b>0.1481</b>	<b>1,094.8640</b>

**3.3 Site Preparation - 2026**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000		0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931	3,718.9320
<b>Total</b>	<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>19.6570</b>	<b>1.0868</b>	<b>20.7438</b>	<b>10.1025</b>	<b>0.9999</b>	<b>11.1023</b>		<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>	<b>3,718.9320</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1600e-003	0.2951	0.1160	1.3600e-003	0.0513	2.0700e-003	0.0533	0.0148	1.9800e-003	0.0167		145.8869	145.8869	3.6300e-003	0.0215	152.3930
Worker	0.0552	0.0319	0.4634	1.4800e-003	0.2012	8.6000e-004	0.2021	0.0534	7.9000e-004	0.0542		155.3472	155.3472	3.2600e-003	3.6100e-003	156.5053
<b>Total</b>	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.8400e-003</b>	<b>0.2525</b>	<b>2.9300e-003</b>	<b>0.2554</b>	<b>0.0681</b>	<b>2.7700e-003</b>	<b>0.0709</b>		<b>301.2341</b>	<b>301.2341</b>	<b>6.8900e-003</b>	<b>0.0251</b>	<b>308.8983</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2829	0.0000	7.2829	3.7430	0.0000	3.7430			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
<b>Total</b>	<b>0.6967</b>	<b>12.1620</b>	<b>22.9600</b>	<b>0.0381</b>	<b>7.2829</b>	<b>0.0621</b>	<b>7.3450</b>	<b>3.7430</b>	<b>0.0621</b>	<b>3.8050</b>	<b>0.0000</b>	<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>		<b>3,718.9320</b>

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1600e-003	0.2951	0.1160	1.3600e-003	0.0480	2.0700e-003	0.0500	0.0140	1.9800e-003	0.0159		145.8869	145.8869	3.6300e-003	0.0215	152.3930
Worker	0.0552	0.0319	0.4534	1.4800e-003	0.1855	8.6000e-004	0.1863	0.0495	7.9000e-004	0.0503		155.3472	155.3472	3.2600e-003	3.6100e-003	156.5053
<b>Total</b>	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.8400e-003</b>	<b>0.2334</b>	<b>2.9300e-003</b>	<b>0.2364</b>	<b>0.0634</b>	<b>2.7700e-003</b>	<b>0.0662</b>		<b>301.2341</b>	<b>301.2341</b>	<b>6.8900e-003</b>	<b>0.0251</b>	<b>308.8983</b>

**3.4 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>9.2036</b>	<b>1.1309</b>	<b>10.3345</b>	<b>3.6538</b>	<b>1.0404</b>	<b>4.6942</b>		<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Unmitigated Construction Off-Site**

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.5901	0.2320	2.7200e-003	0.1025	4.1400e-003	0.1066	0.0295	3.9600e-003	0.0335		291.7738	291.7738	7.2600e-003	0.0431	304.7860
Worker	0.0614	0.0354	0.5037	1.6400e-003	0.2236	9.6000e-004	0.2245	0.0593	8.8000e-004	0.0602		172.6080	172.6080	3.6200e-003	4.0100e-003	173.8948
<b>Total</b>	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.3600e-003</b>	<b>0.3261</b>	<b>5.1000e-003</b>	<b>0.3312</b>	<b>0.0888</b>	<b>4.8400e-003</b>	<b>0.0936</b>		<b>464.3817</b>	<b>464.3817</b>	<b>0.0109</b>	<b>0.0471</b>	<b>478.6808</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4099	0.0000	3.4099	1.3537	0.0000	1.3537			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>1.0110</b>	<b>19.2707</b>	<b>36.7226</b>	<b>0.0621</b>	<b>3.4099</b>	<b>0.1015</b>	<b>3.5115</b>	<b>1.3537</b>	<b>0.1015</b>	<b>1.4553</b>	<b>0.0000</b>	<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					



Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.5901	0.2320	2.7200e-003	0.0959	4.1400e-003	0.1001	0.0279	3.9600e-003	0.0319	291.7738	291.7738	7.2600e-003	0.0431	304.7860	
Worker	0.0614	0.0354	0.5037	1.6400e-003	0.2061	9.6000e-004	0.2070	0.0550	8.8000e-004	0.0559	172.6080	172.6080	3.6200e-003	4.0100e-003	173.8948	
<b>Total</b>	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.3600e-003</b>	<b>0.3020</b>	<b>5.1000e-003</b>	<b>0.3071</b>	<b>0.0829</b>	<b>4.8400e-003</b>	<b>0.0877</b>	<b>464.3817</b>	<b>464.3817</b>	<b>0.0109</b>	<b>0.0471</b>	<b>478.6808</b>	

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.2045	1.6529	0.0194	0.7304	0.0295	0.7598	0.2103	0.0282	0.2385		2,078.8880	2,078.8880	0.0518	0.3068	2,171.6005
Worker	0.8992	0.5189	7.3797	0.0241	3.2751	0.0140	3.2891	0.8686	0.0129	0.8815		2,528.7068	2,528.7068	0.0531	0.0588	2,547.5585
<b>Total</b>	<b>1.0154</b>	<b>4.7233</b>	<b>9.0326</b>	<b>0.0435</b>	<b>4.0054</b>	<b>0.0435</b>	<b>4.0489</b>	<b>1.0789</b>	<b>0.0411</b>	<b>1.1200</b>		<b>4,607.5948</b>	<b>4,607.5948</b>	<b>0.1048</b>	<b>0.3656</b>	<b>4,719.1590</b>

**Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2033	12.5209	16.3797	0.0270		0.3989	0.3989		0.3789	0.3789	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.2033</b>	<b>12.5209</b>	<b>16.3797</b>	<b>0.0270</b>		<b>0.3989</b>	<b>0.3989</b>		<b>0.3789</b>	<b>0.3789</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.2045	1.6529	0.0194	0.6836	0.0295	0.7130	0.1988	0.0282	0.2270		2,078.8880	2,078.8880	0.0518	0.3068	2,171.6005
Worker	0.8932	0.5189	7.3797	0.0241	3.0188	0.0140	3.0328	0.8057	0.0129	0.8186		2,528.7068	2,528.7068	0.0531	0.0588	2,547.5585
<b>Total</b>	<b>1.0154</b>	<b>4.7233</b>	<b>9.0326</b>	<b>0.0435</b>	<b>3.7024</b>	<b>0.0435</b>	<b>3.7459</b>	<b>1.0045</b>	<b>0.0411</b>	<b>1.0456</b>		<b>4,607.5948</b>	<b>4,607.5948</b>	<b>0.1048</b>	<b>0.3656</b>	<b>4,719.1590</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1143	4.1732	1.6340	0.0190	0.7303	0.0293	0.7596	0.2103	0.0280	0.2383		2,034.9648	2,034.9648	0.0500	0.3002	2,125.6623
Worker	0.8442	0.4709	6.9518	0.0234	3.2751	0.0132	3.2882	0.8686	0.0121	0.8807		2,473.8978	2,473.8978	0.0483	0.0556	2,491.6897
<b>Total</b>	<b>0.9585</b>	<b>4.6441</b>	<b>8.5858</b>	<b>0.0424</b>	<b>4.0054</b>	<b>0.0425</b>	<b>4.0479</b>	<b>1.0789</b>	<b>0.0402</b>	<b>1.1190</b>		<b>4,508.8626</b>	<b>4,508.8626</b>	<b>0.0983</b>	<b>0.3557</b>	<b>4,617.3320</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2033	12.5209	16.3797	0.0270		0.3989	0.3989		0.3789	0.3789	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.2033</b>	<b>12.5209</b>	<b>16.3797</b>	<b>0.0270</b>		<b>0.3989</b>	<b>0.3989</b>		<b>0.3789</b>	<b>0.3789</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1143	4.1732	1.6340	0.0190	0.6835	0.0293	0.7128	0.1988	0.0280	0.2268		2,034.9648	2,034.9648	0.0500	0.3002	2,125.6623
Worker	0.8442	0.4709	6.9518	0.0234	3.0188	0.0132	3.0320	0.8057	0.0121	0.8178		2,473.8978	2,473.8978	0.0483	0.0556	2,491.6697
<b>Total</b>	<b>0.9585</b>	<b>4.6441</b>	<b>8.5858</b>	<b>0.0424</b>	<b>3.7023</b>	<b>0.0425</b>	<b>3.7448</b>	<b>1.0045</b>	<b>0.0402</b>	<b>1.0446</b>		<b>4,508.8626</b>	<b>4,508.8626</b>	<b>0.0983</b>	<b>0.3557</b>	<b>4,617.3320</b>

**3.6 Paving - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Unmitigated Construction Off-Site**

**Construction P1 - Mitigated - San Bernardino-South Coast County, Winter**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0432	0.0241	0.3559	1.2000e-003	0.1677	6.8000e-004	0.1683	0.0445	6.2000e-004	0.0451		126.6501	126.6501	2.4700e-003	2.8500e-003	127.5599
<b>Total</b>	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.2000e-003</b>	<b>0.1677</b>	<b>6.8000e-004</b>	<b>0.1683</b>	<b>0.0445</b>	<b>6.2000e-004</b>	<b>0.0451</b>		<b>126.6501</b>	<b>126.6501</b>	<b>2.4700e-003</b>	<b>2.8500e-003</b>	<b>127.5599</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0432	0.0241	0.3559	1.2000e-003	0.1546	6.8000e-004	0.1552	0.0413	6.2000e-004	0.0419		126.6501	126.6501	2.4700e-003	2.8500e-003	127.5599
<b>Total</b>	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.2000e-003</b>	<b>0.1546</b>	<b>6.8000e-004</b>	<b>0.1552</b>	<b>0.0413</b>	<b>6.2000e-004</b>	<b>0.0419</b>		<b>126.6501</b>	<b>126.6501</b>	<b>2.4700e-003</b>	<b>2.8500e-003</b>	<b>127.5599</b>

**3.7 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.2983					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>26.4691</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1700	0.0948	1.3999	4.7100e-003	0.6595	2.6600e-003	0.6621	0.1749	2.4400e-003	0.1773		498.1569	498.1569	9.7300e-003	0.0112	501.7355

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1700	0.0948	1.3999	4.7100e-003	0.6595	2.6600e-003	0.6621	0.1749	2.4400e-003	0.1773		498.1569	498.1569	9.7300e-003	0.0112	501.7355
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.2983					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>26.4691</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1700	0.0948	1.3999	4.7100e-003	0.6079	2.6600e-003	0.6105	0.1622	2.4400e-003	0.1647		498.1569	498.1569	9.7300e-003	0.0112	501.7355
<b>Total</b>	<b>0.1700</b>	<b>0.0948</b>	<b>1.3999</b>	<b>4.7100e-003</b>	<b>0.6079</b>	<b>2.6600e-003</b>	<b>0.6105</b>	<b>0.1622</b>	<b>2.4400e-003</b>	<b>0.1647</b>		<b>498.1569</b>	<b>498.1569</b>	<b>9.7300e-003</b>	<b>0.0112</b>	<b>501.7355</b>

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P1 - Mitigated**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	144.91	1000sqft	1.21	144,912.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2027

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information received from the College District.

Trips and VMT - See the Construction Phase 1 modeling assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Architectural Coating - Based on new propose parking lot areas. Includes mitigation.

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186. Mitigation for Tier 4 Interim

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	33,124.00	19,284.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00



Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblLandUse	LotAcreage	3.33	1.21
tblTripsAndVMT	HaulingTripNumber	292.00	294.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	2.9789	28.5684	27.0668	0.0704	19.9095	1.1360	20.9992	10.1706	1.0453	11.1732	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571
2027	26.6391	17.1138	24.6705	0.0693	4.0054	0.5700	4.5754	1.0789	0.5364	1.6153	0.0000	7,065.3370	7,065.3370	0.7162	0.3557	7,188.8301
<b>Maximum</b>	<b>26.6391</b>	<b>28.5684</b>	<b>27.0668</b>	<b>0.0704</b>	<b>19.9095</b>	<b>1.1360</b>	<b>20.9992</b>	<b>10.1706</b>	<b>1.0453</b>	<b>11.1732</b>	<b>0.0000</b>	<b>7,164.0692</b>	<b>7,164.0692</b>	<b>1.9541</b>	<b>0.3656</b>	<b>7,290.6571</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Year	lb/day										lb/day					
2026	2.2188	19.8962	37.4583	0.0704	8.6368	0.4424	8.7018	4.3822	0.4200	4.4471	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571
2027	26.6391	17.1650	24.9656	0.0693	3.7023	0.4413	4.1437	1.0045	0.4191	1.4235	0.0000	7,065.3370	7,065.3370	0.7162	0.3557	7,188.8301
Maximum	26.6391	19.8962	37.4583	0.0704	8.6368	0.4424	8.7018	4.3822	0.4200	4.4471	0.0000	7,164.0692	7,164.0692	1.9541	0.3656	7,290.6571

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.57	18.87	-20.66	0.00	48.40	48.20	49.77	52.12	46.95	54.09	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	7/14/2027	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 12.68

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 217,368; Non-Residential Outdoor: 72,456; Striped Parking Area: 19,284

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	294.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	293.00	114.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	59.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Cleaner Engines for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Clean Paved Roads

**3.2 Demolition - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1585	0.0000	3.1585	0.4782	0.0000	0.4782			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606
<b>Total</b>	<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>	<b>3.1585</b>	<b>0.8528</b>	<b>4.0113</b>	<b>0.4782</b>	<b>0.7920</b>	<b>1.2702</b>		<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0319	1.6750	0.5007	7.7800e-003	0.2574	0.0166	0.2740	0.0706	0.0159	0.0864		847.3517	847.3517	0.0350	0.1343	888.2464
Vendor	4.0800e-003	0.1475	0.0580	6.8000e-004	0.0256	1.0300e-003	0.0267	7.3800e-003	9.9000e-004	8.3700e-003		72.9434	72.9434	1.8200e-003	0.0108	76.1965
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
<b>Total</b>	<b>0.0820</b>	<b>1.8491</b>	<b>0.9365</b>	<b>9.6900e-003</b>	<b>0.4507</b>	<b>0.0183</b>	<b>0.4690</b>	<b>0.1224</b>	<b>0.0175</b>	<b>0.1399</b>		<b>1,049.7511</b>	<b>1,049.7511</b>	<b>0.0396</b>	<b>0.1481</b>	<b>1,094.8640</b>

**Mitigated Construction On-Site**

**Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3503	0.0000	1.3503	0.2044	0.0000	0.2044			0.0000			0.0000
Off-Road	0.7646	13.5951	24.4601	0.0388		0.1461	0.1461		0.1461	0.1461	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
<b>Total</b>	<b>0.7646</b>	<b>13.5951</b>	<b>24.4601</b>	<b>0.0388</b>	<b>1.3503</b>	<b>0.1461</b>	<b>1.4964</b>	<b>0.2044</b>	<b>0.1461</b>	<b>0.3506</b>	<b>0.0000</b>	<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0319	1.6750	0.5007	7.7800e-003	0.2399	0.0166	0.2565	0.0663	0.0159	0.0822		847.3517	847.3517	0.0350	0.1343	888.2464
Vendor	4.0800e-003	0.1475	0.0580	6.8000e-004	0.0240	1.0300e-003	0.0250	6.9800e-003	9.9000e-004	7.9700e-003		72.9434	72.9434	1.8200e-003	0.0108	76.1965
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1546	7.2000e-004	0.1553	0.0413	6.6000e-004	0.0419		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
<b>Total</b>	<b>0.0820</b>	<b>1.8491</b>	<b>0.9365</b>	<b>9.6900e-003</b>	<b>0.4185</b>	<b>0.0183</b>	<b>0.4368</b>	<b>0.1145</b>	<b>0.0175</b>	<b>0.1320</b>		<b>1,049.7511</b>	<b>1,049.7511</b>	<b>0.0396</b>	<b>0.1481</b>	<b>1,094.8640</b>

**3.3 Site Preparation - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000		0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931	3,718.9320
<b>Total</b>	<b>2.4727</b>	<b>25.2339</b>	<b>17.9118</b>	<b>0.0381</b>	<b>19.6570</b>	<b>1.0868</b>	<b>20.7438</b>	<b>10.1025</b>	<b>0.9999</b>	<b>11.1023</b>		<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>	<b>3,718.9320</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1600e-003	0.2951	0.1160	1.3600e-003	0.0513	2.0700e-003	0.0533	0.0148	1.9800e-003	0.0167		145.8869	145.8869	3.6300e-003	0.0215	152.3930
Worker	0.0552	0.0319	0.4634	1.4800e-003	0.2012	8.6000e-004	0.2021	0.0534	7.9000e-004	0.0542		155.3472	155.3472	3.2600e-003	3.6100e-003	156.5053
<b>Total</b>	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.8400e-003</b>	<b>0.2525</b>	<b>2.9300e-003</b>	<b>0.2554</b>	<b>0.0681</b>	<b>2.7700e-003</b>	<b>0.0709</b>		<b>301.2341</b>	<b>301.2341</b>	<b>6.8900e-003</b>	<b>0.0251</b>	<b>308.8983</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
<b>Total</b>	<b>0.6967</b>	<b>12.1620</b>	<b>22.9600</b>	<b>0.0381</b>	<b>8.4034</b>	<b>0.0621</b>	<b>8.4655</b>	<b>4.3188</b>	<b>0.0621</b>	<b>4.3809</b>	<b>0.0000</b>	<b>3,689.1037</b>	<b>3,689.1037</b>	<b>1.1931</b>		<b>3,718.9320</b>

**Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1600e-003	0.2951	0.1160	1.3600e-003	0.0480	2.0700e-003	0.0500	0.0140	1.9800e-003	0.0159		145.8869	145.8869	3.6300e-003	0.0215	152.3930
Worker	0.0552	0.0319	0.4534	1.4800e-003	0.1855	8.6000e-004	0.1863	0.0495	7.9000e-004	0.0503		155.3472	155.3472	3.2600e-003	3.6100e-003	156.5053
<b>Total</b>	<b>0.0634</b>	<b>0.3269</b>	<b>0.5694</b>	<b>2.8400e-003</b>	<b>0.2334</b>	<b>2.9300e-003</b>	<b>0.2364</b>	<b>0.0634</b>	<b>2.7700e-003</b>	<b>0.0662</b>		<b>301.2341</b>	<b>301.2341</b>	<b>6.8900e-003</b>	<b>0.0251</b>	<b>308.8983</b>

**3.4 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>2.9012</b>	<b>27.9429</b>	<b>26.3311</b>	<b>0.0621</b>	<b>9.2036</b>	<b>1.1309</b>	<b>10.3345</b>	<b>3.6538</b>	<b>1.0404</b>	<b>4.6942</b>		<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Unmitigated Construction Off-Site**

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.5901	0.2320	2.7200e-003	0.1025	4.1400e-003	0.1066	0.0295	3.9600e-003	0.0335		291.7738	291.7738	7.2600e-003	0.0431	304.7860
Worker	0.0614	0.0354	0.5037	1.6400e-003	0.2236	9.6000e-004	0.2245	0.0593	8.8000e-004	0.0602		172.6080	172.6080	3.6200e-003	4.0100e-003	173.8948
<b>Total</b>	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.3600e-003</b>	<b>0.3261</b>	<b>5.1000e-003</b>	<b>0.3312</b>	<b>0.0888</b>	<b>4.8400e-003</b>	<b>0.0936</b>		<b>464.3817</b>	<b>464.3817</b>	<b>0.0109</b>	<b>0.0471</b>	<b>478.6808</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9345	0.0000	3.9345	1.5620	0.0000	1.5620			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
<b>Total</b>	<b>1.0110</b>	<b>19.2707</b>	<b>36.7226</b>	<b>0.0621</b>	<b>3.9345</b>	<b>0.1015</b>	<b>4.0361</b>	<b>1.5620</b>	<b>0.1015</b>	<b>1.6635</b>	<b>0.0000</b>	<b>6,008.2814</b>	<b>6,008.2814</b>	<b>1.9432</b>		<b>6,056.8614</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					



Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.5901	0.2320	2.7200e-003	0.0959	4.1400e-003	0.1001	0.0279	3.9600e-003	0.0319	291.7738	291.7738	7.2600e-003	0.0431	304.7860	
Worker	0.0614	0.0354	0.5037	1.6400e-003	0.2061	9.6000e-004	0.2070	0.0550	8.8000e-004	0.0559	172.6080	172.6080	3.6200e-003	4.0100e-003	173.8948	
<b>Total</b>	<b>0.0777</b>	<b>0.6255</b>	<b>0.7357</b>	<b>4.3600e-003</b>	<b>0.3020</b>	<b>5.1000e-003</b>	<b>0.3071</b>	<b>0.0829</b>	<b>4.8400e-003</b>	<b>0.0877</b>	<b>464.3817</b>	<b>464.3817</b>	<b>0.0109</b>	<b>0.0471</b>	<b>478.6808</b>	

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.2045	1.6529	0.0194	0.7304	0.0295	0.7598	0.2103	0.0282	0.2385		2,078.8880	2,078.8880	0.0518	0.3068	2,171.6005
Worker	0.8992	0.5189	7.3797	0.0241	3.2751	0.0140	3.2891	0.8686	0.0129	0.8815		2,528.7068	2,528.7068	0.0531	0.0588	2,547.5585
<b>Total</b>	<b>1.0154</b>	<b>4.7233</b>	<b>9.0326</b>	<b>0.0435</b>	<b>4.0054</b>	<b>0.0435</b>	<b>4.0489</b>	<b>1.0789</b>	<b>0.0411</b>	<b>1.1200</b>		<b>4,607.5948</b>	<b>4,607.5948</b>	<b>0.1048</b>	<b>0.3656</b>	<b>4,719.1590</b>

**Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2033	12.5209	16.3797	0.0270		0.3989	0.3989		0.3789	0.3789	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.2033</b>	<b>12.5209</b>	<b>16.3797</b>	<b>0.0270</b>		<b>0.3989</b>	<b>0.3989</b>		<b>0.3789</b>	<b>0.3789</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.2045	1.6529	0.0194	0.6836	0.0295	0.7130	0.1988	0.0282	0.2270		2,078.8880	2,078.8880	0.0518	0.3068	2,171.6005
Worker	0.8932	0.5189	7.3797	0.0241	3.0188	0.0140	3.0328	0.8057	0.0129	0.8186		2,528.7068	2,528.7068	0.0531	0.0588	2,547.5585
<b>Total</b>	<b>1.0154</b>	<b>4.7233</b>	<b>9.0326</b>	<b>0.0435</b>	<b>3.7024</b>	<b>0.0435</b>	<b>3.7459</b>	<b>1.0045</b>	<b>0.0411</b>	<b>1.0456</b>		<b>4,607.5948</b>	<b>4,607.5948</b>	<b>0.1048</b>	<b>0.3656</b>	<b>4,719.1590</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1143	4.1732	1.6340	0.0190	0.7303	0.0293	0.7596	0.2103	0.0280	0.2383		2,034.9648	2,034.9648	0.0500	0.3002	2,125.6623
Worker	0.8442	0.4709	6.9518	0.0234	3.2751	0.0132	3.2882	0.8686	0.0121	0.8807		2,473.8978	2,473.8978	0.0483	0.0556	2,491.6897
<b>Total</b>	<b>0.9585</b>	<b>4.6441</b>	<b>8.5858</b>	<b>0.0424</b>	<b>4.0054</b>	<b>0.0425</b>	<b>4.0479</b>	<b>1.0789</b>	<b>0.0402</b>	<b>1.1190</b>		<b>4,508.8626</b>	<b>4,508.8626</b>	<b>0.0983</b>	<b>0.3557</b>	<b>4,617.3320</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2033	12.5209	16.3797	0.0270		0.3989	0.3989		0.3789	0.3789	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.2033</b>	<b>12.5209</b>	<b>16.3797</b>	<b>0.0270</b>		<b>0.3989</b>	<b>0.3989</b>		<b>0.3789</b>	<b>0.3789</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1143	4.1732	1.6340	0.0190	0.6835	0.0293	0.7128	0.1988	0.0280	0.2268		2,034.9648	2,034.9648	0.0500	0.3002	2,125.6623
Worker	0.8442	0.4709	6.9518	0.0234	3.0188	0.0132	3.0320	0.8057	0.0121	0.8178		2,473.8978	2,473.8978	0.0483	0.0556	2,491.6697
<b>Total</b>	<b>0.9585</b>	<b>4.6441</b>	<b>8.5858</b>	<b>0.0424</b>	<b>3.7023</b>	<b>0.0425</b>	<b>3.7448</b>	<b>1.0045</b>	<b>0.0402</b>	<b>1.0446</b>		<b>4,508.8626</b>	<b>4,508.8626</b>	<b>0.0983</b>	<b>0.3557</b>	<b>4,617.3320</b>

**3.6 Paving - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Unmitigated Construction Off-Site**

**Construction P1 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0432	0.0241	0.3559	1.2000e-003	0.1677	6.8000e-004	0.1683	0.0445	6.2000e-004	0.0451		126.6501	126.6501	2.4700e-003	2.8500e-003	127.5599
<b>Total</b>	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.2000e-003</b>	<b>0.1677</b>	<b>6.8000e-004</b>	<b>0.1683</b>	<b>0.0445</b>	<b>6.2000e-004</b>	<b>0.0451</b>		<b>126.6501</b>	<b>126.6501</b>	<b>2.4700e-003</b>	<b>2.8500e-003</b>	<b>127.5599</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.6611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5762</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0432	0.0241	0.3559	1.2000e-003	0.1546	6.8000e-004	0.1552	0.0413	6.2000e-004	0.0419		126.6501	126.6501	2.4700e-003	2.8500e-003	127.5599
<b>Total</b>	<b>0.0432</b>	<b>0.0241</b>	<b>0.3559</b>	<b>1.2000e-003</b>	<b>0.1546</b>	<b>6.8000e-004</b>	<b>0.1552</b>	<b>0.0413</b>	<b>6.2000e-004</b>	<b>0.0419</b>		<b>126.6501</b>	<b>126.6501</b>	<b>2.4700e-003</b>	<b>2.8500e-003</b>	<b>127.5599</b>

**3.7 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.2983					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>26.4691</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1700	0.0948	1.3999	4.7100e-003	0.6595	2.6600e-003	0.6621	0.1749	2.4400e-003	0.1773		498.1569	498.1569	9.7300e-003	0.0112	501.7355

Construction P1 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1700	0.0948	1.3999	4.7100e-003	0.6595	2.6600e-003	0.6621	0.1749	2.4400e-003	0.1773		498.1569	498.1569	9.7300e-003	0.0112	501.7355
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.2983					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>26.4691</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1700	0.0948	1.3999	4.7100e-003	0.6079	2.6600e-003	0.6105	0.1622	2.4400e-003	0.1647		498.1569	498.1569	9.7300e-003	0.0112	501.7355
<b>Total</b>	<b>0.1700</b>	<b>0.0948</b>	<b>1.3999</b>	<b>4.7100e-003</b>	<b>0.6079</b>	<b>2.6600e-003</b>	<b>0.6105</b>	<b>0.1622</b>	<b>2.4400e-003</b>	<b>0.1647</b>		<b>498.1569</b>	<b>498.1569</b>	<b>9.7300e-003</b>	<b>0.0112</b>	<b>501.7355</b>

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P1 - Mitigated**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	144.91	1000sqft	1.21	144,912.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2027

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information received from the College District.

Trips and VMT - See the Construction Phase 1 modeling assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Architectural Coating - Based on new propose parking lot areas. Includes mitigation.

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186. Mitigation for Tier 4 Interim

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	33,124.00	19,284.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblLandUse	LotAcreage	3.33	1.21
tblTripsAndVMT	HaulingTripNumber	292.00	294.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00

**2.0 Emissions Summary**

**2.1 Overall Construction  
Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.3118	2.4954	3.2597	8.8100e-003	0.6735	0.0886	0.7621	0.2196	0.0828	0.3023	0.0000	807.2010	807.2010	0.1063	0.0356	820.4570
2027	0.4044	0.9458	1.4187	3.7700e-003	0.2027	0.0330	0.2357	0.0547	0.0310	0.0856	0.0000	347.6788	347.6788	0.0382	0.0162	353.4508
<b>Maximum</b>	<b>0.4044</b>	<b>2.4954</b>	<b>3.2597</b>	<b>8.8100e-003</b>	<b>0.6735</b>	<b>0.0886</b>	<b>0.7621</b>	<b>0.2196</b>	<b>0.0828</b>	<b>0.3023</b>	<b>0.0000</b>	<b>807.2010</b>	<b>807.2010</b>	<b>0.1063</b>	<b>0.0356</b>	<b>820.4570</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Year	tons/yr										MT/yr					
2026	0.2448	2.2491	3.5209	8.8100e-003	0.4743	0.0480	0.5223	0.1428	0.0458	0.1885	0.0000	807.2005	807.2005	0.1063	0.0356	820.4565
2027	0.3963	0.9484	1.4333	3.7700e-003	0.1874	0.0266	0.2140	0.0509	0.0251	0.0760	0.0000	347.6786	347.6786	0.0382	0.0162	353.4506
Maximum	0.3963	2.2491	3.5209	8.8100e-003	0.4743	0.0480	0.5223	0.1428	0.0458	0.1885	0.0000	807.2005	807.2005	0.1063	0.0356	820.4565

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	10.49	7.08	-5.89	0.00	24.48	38.62	26.20	29.38	37.66	31.81	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2026	3-31-2026	0.8878	0.5856
2	4-1-2026	6-30-2026	0.6293	0.6257
3	7-1-2026	9-30-2026	0.6362	0.6325
4	10-1-2026	12-31-2026	0.6432	0.6395
5	1-1-2027	3-31-2027	0.6248	0.6212
6	4-1-2027	6-30-2027	0.5881	0.5862
7	7-1-2027	9-30-2027	0.1394	0.1394
		Highest	0.8878	0.6395

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	7/14/2027	5	20	

Acres of Grading (Site Preparation Phase): 15

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Acres of Grading (Grading Phase): 90**

**Acres of Paving: 12.68**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 217,368; Non-Residential Outdoor: 72,456; Striped Parking Area: 19,284**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	294.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Building Construction	9	293.00	114.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	59.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Cleaner Engines for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0316	0.0000	0.0316	4.7800e-003	0.0000	4.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9977	33.9977	9.4900e-003	0.0000	34.2350
<b>Total</b>	<b>0.0209</b>	<b>0.1920</b>	<b>0.1942</b>	<b>3.9000e-004</b>	<b>0.0316</b>	<b>8.5300e-003</b>	<b>0.0401</b>	<b>4.7800e-003</b>	<b>7.9200e-003</b>	<b>0.0127</b>	<b>0.0000</b>	<b>33.9977</b>	<b>33.9977</b>	<b>9.4900e-003</b>	<b>0.0000</b>	<b>34.2350</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3000e-004	0.0168	4.9600e-003	8.0000e-005	2.5300e-003	1.7000e-004	2.7000e-003	7.0000e-004	1.6000e-004	8.5000e-004	0.0000	7.6802	7.6802	3.2000e-004	1.2200e-003	8.0509

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	4.2000e-004	2.8000e-004	3.9600e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.1975	1.1975	2.0000e-005	3.0000e-005	1.2066
<b>Total</b>	<b>7.9000e-004</b>	<b>0.0186</b>	<b>9.4900e-003</b>	<b>1.0000e-004</b>	<b>4.4200e-003</b>	<b>1.9000e-004</b>	<b>4.6100e-003</b>	<b>1.2100e-003</b>	<b>1.8000e-004</b>	<b>1.3700e-003</b>	<b>0.0000</b>	<b>9.5385</b>	<b>9.5385</b>	<b>3.6000e-004</b>	<b>1.3500e-003</b>	<b>9.9477</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0117	0.0000	0.0117	1.7700e-003	0.0000	1.7700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6500e-003	0.1360	0.2446	3.9000e-004		1.4600e-003	1.4600e-003		1.4600e-003	1.4600e-003	0.0000	33.9976	33.9976	9.4900e-003	0.0000	34.2349
<b>Total</b>	<b>7.6500e-003</b>	<b>0.1360</b>	<b>0.2446</b>	<b>3.9000e-004</b>	<b>0.0117</b>	<b>1.4600e-003</b>	<b>0.0132</b>	<b>1.7700e-003</b>	<b>1.4600e-003</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>33.9976</b>	<b>33.9976</b>	<b>9.4900e-003</b>	<b>0.0000</b>	<b>34.2349</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3000e-004	0.0168	4.9600e-003	8.0000e-005	2.3600e-003	1.7000e-004	2.5300e-003	6.5000e-004	1.6000e-004	8.1000e-004	0.0000	7.6802	7.6802	3.2000e-004	1.2200e-003	8.0509
Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	4.2000e-004	2.8000e-004	3.9600e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5200e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1975	1.1975	2.0000e-005	3.0000e-005	1.2066
<b>Total</b>	<b>7.9000e-004</b>	<b>0.0186</b>	<b>9.4900e-003</b>	<b>1.0000e-004</b>	<b>4.1200e-003</b>	<b>1.9000e-004</b>	<b>4.3000e-003</b>	<b>1.1300e-003</b>	<b>1.8000e-004</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>9.5385</b>	<b>9.5385</b>	<b>3.6000e-004</b>	<b>1.3500e-003</b>	<b>9.9477</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2026  
Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
<b>Total</b>	<b>0.0124</b>	<b>0.1262</b>	<b>0.0896</b>	<b>1.9000e-004</b>	<b>0.0983</b>	<b>5.4300e-003</b>	<b>0.1037</b>	<b>0.0505</b>	<b>5.0000e-003</b>	<b>0.0555</b>	<b>0.0000</b>	<b>16.7335</b>	<b>16.7335</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8688</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	2.5000e-004	1.7000e-004	2.3800e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7185	0.7185	1.0000e-005	2.0000e-005	0.7239
<b>Total</b>	<b>2.9000e-004</b>	<b>1.6400e-003</b>	<b>2.9500e-003</b>	<b>2.0000e-005</b>	<b>1.2400e-003</b>	<b>1.0000e-005</b>	<b>1.2500e-003</b>	<b>3.3000e-004</b>	<b>1.0000e-005</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>1.3793</b>	<b>1.3793</b>	<b>3.0000e-005</b>	<b>1.2000e-004</b>	<b>1.4142</b>

**Mitigated Construction On-Site**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0364	0.0000	0.0364	0.0187	0.0000	0.0187	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
<b>Total</b>	<b>3.4800e-003</b>	<b>0.0608</b>	<b>0.1148</b>	<b>1.9000e-004</b>	<b>0.0364</b>	<b>3.1000e-004</b>	<b>0.0367</b>	<b>0.0187</b>	<b>3.1000e-004</b>	<b>0.0190</b>	<b>0.0000</b>	<b>16.7335</b>	<b>16.7335</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8688</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4700e-003	5.7000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6608	0.6608	2.0000e-005	1.0000e-004	0.6903
Worker	2.5000e-004	1.7000e-004	2.3800e-003	1.0000e-005	9.1000e-004	0.0000	9.1000e-004	2.4000e-004	0.0000	2.5000e-004	0.0000	0.7185	0.7185	1.0000e-005	2.0000e-005	0.7239
<b>Total</b>	<b>2.9000e-004</b>	<b>1.6400e-003</b>	<b>2.9500e-003</b>	<b>2.0000e-005</b>	<b>1.1500e-003</b>	<b>1.0000e-005</b>	<b>1.1600e-003</b>	<b>3.1000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.3793</b>	<b>1.3793</b>	<b>3.0000e-005</b>	<b>1.2000e-004</b>	<b>1.4142</b>

**3.4 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4191	0.3950	9.3000e-004		0.0170	0.0170		0.0156	0.0156	0.0000	81.7593	81.7593	0.0264	0.0000	82.4204
<b>Total</b>	<b>0.0435</b>	<b>0.4191</b>	<b>0.3950</b>	<b>9.3000e-004</b>	<b>0.1381</b>	<b>0.0170</b>	<b>0.1550</b>	<b>0.0548</b>	<b>0.0156</b>	<b>0.0704</b>	<b>0.0000</b>	<b>81.7593</b>	<b>81.7593</b>	<b>0.0264</b>	<b>0.0000</b>	<b>82.4204</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	8.8100e-003	3.4200e-003	4.0000e-005	1.5100e-003	6.0000e-005	1.5800e-003	4.4000e-004	6.0000e-005	5.0000e-004	0.0000	3.9647	3.9647	1.0000e-004	5.9000e-004	4.1415
Worker	8.5000e-004	5.6000e-004	7.9200e-003	3.0000e-005	3.2900e-003	1.0000e-005	3.3000e-003	8.7000e-004	1.0000e-005	8.9000e-004	0.0000	2.3951	2.3951	5.0000e-005	6.0000e-005	2.4131
<b>Total</b>	<b>1.1000e-003</b>	<b>9.3700e-003</b>	<b>0.0113</b>	<b>7.0000e-005</b>	<b>4.8000e-003</b>	<b>7.0000e-005</b>	<b>4.8800e-003</b>	<b>1.3100e-003</b>	<b>7.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>6.3598</b>	<b>6.3598</b>	<b>1.5000e-004</b>	<b>6.5000e-004</b>	<b>6.5547</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0512	0.0000	0.0512	0.0203	0.0000	0.0203	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.2891	0.5508	9.3000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	81.7592	81.7592	0.0264	0.0000	82.4203
<b>Total</b>	<b>0.0152</b>	<b>0.2891</b>	<b>0.5508</b>	<b>9.3000e-004</b>	<b>0.0512</b>	<b>1.5200e-003</b>	<b>0.0527</b>	<b>0.0203</b>	<b>1.5200e-003</b>	<b>0.0218</b>	<b>0.0000</b>	<b>81.7592</b>	<b>81.7592</b>	<b>0.0264</b>	<b>0.0000</b>	<b>82.4203</b>



**Construction P1 - Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	8.8100e-003	3.4200e-003	4.0000e-005	1.4200e-003	6.0000e-005	1.4800e-003	4.1000e-004	6.0000e-005	4.7000e-004	0.0000	3.9647	3.9647	1.0000e-004	5.9000e-004	4.1415
Worker	8.5000e-004	5.6000e-004	7.9200e-003	3.0000e-005	3.0300e-003	1.0000e-005	3.0500e-003	8.1000e-004	1.0000e-005	8.2000e-004	0.0000	2.3951	2.3951	5.0000e-005	6.0000e-005	2.4131
<b>Total</b>	<b>1.1000e-003</b>	<b>9.3700e-003</b>	<b>0.0113</b>	<b>7.0000e-005</b>	<b>4.4500e-003</b>	<b>7.0000e-005</b>	<b>4.5300e-003</b>	<b>1.2200e-003</b>	<b>7.0000e-005</b>	<b>1.2900e-003</b>	<b>0.0000</b>	<b>6.3598</b>	<b>6.3598</b>	<b>1.5000e-004</b>	<b>6.5000e-004</b>	<b>6.5547</b>

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0791	233.0791	0.0548	0.0000	234.4488
<b>Total</b>	<b>0.1374</b>	<b>1.2532</b>	<b>1.6165</b>	<b>2.7100e-003</b>		<b>0.0530</b>	<b>0.0530</b>		<b>0.0499</b>	<b>0.0499</b>	<b>0.0000</b>	<b>233.0791</b>	<b>233.0791</b>	<b>0.0548</b>	<b>0.0000</b>	<b>234.4488</b>

**Unmitigated Construction Off-Site**

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.4207	0.1635	1.9500e-003	0.0723	2.9600e-003	0.0752	0.0209	2.8300e-003	0.0237	0.0000	189.2644	189.2644	4.7400e-003	0.0279	197.7061
Worker	0.0832	0.0546	0.7773	2.4700e-003	0.3229	1.4100e-003	0.3243	0.0858	1.3000e-003	0.0871	0.0000	235.0895	235.0895	4.9000e-003	5.5300e-003	236.8614
<b>Total</b>	<b>0.0954</b>	<b>0.4754</b>	<b>0.9408</b>	<b>4.4200e-003</b>	<b>0.3951</b>	<b>4.3700e-003</b>	<b>0.3995</b>	<b>0.1066</b>	<b>4.1300e-003</b>	<b>0.1107</b>	<b>0.0000</b>	<b>424.3539</b>	<b>424.3539</b>	<b>9.6400e-003</b>	<b>0.0335</b>	<b>434.5675</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1209	1.2584	1.6462	2.7100e-003		0.0401	0.0401		0.0381	0.0381	0.0000	233.0788	233.0788	0.0548	0.0000	234.4485
<b>Total</b>	<b>0.1209</b>	<b>1.2584</b>	<b>1.6462</b>	<b>2.7100e-003</b>		<b>0.0401</b>	<b>0.0401</b>		<b>0.0381</b>	<b>0.0381</b>	<b>0.0000</b>	<b>233.0788</b>	<b>233.0788</b>	<b>0.0548</b>	<b>0.0000</b>	<b>234.4485</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.4207	0.1635	1.9500e-003	0.0677	2.9600e-003	0.0706	0.0197	2.8300e-003	0.0226	0.0000	189.2644	189.2644	4.7400e-003	0.0279	197.7061

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0832	0.0546	0.7773	2.4700e-003	0.2977	1.4100e-003	0.2991	0.0796	1.3000e-003	0.0809	0.0000	235.0895	235.0895	4.9000e-003	5.5300e-003	236.8614
<b>Total</b>	<b>0.0954</b>	<b>0.4754</b>	<b>0.9408</b>	<b>4.4200e-003</b>	<b>0.3653</b>	<b>4.3700e-003</b>	<b>0.3697</b>	<b>0.0993</b>	<b>4.1300e-003</b>	<b>0.1034</b>	<b>0.0000</b>	<b>424.3539</b>	<b>424.3539</b>	<b>9.6400e-003</b>	<b>0.0335</b>	<b>434.5675</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8001	114.8001	0.0270	0.0000	115.4748
<b>Total</b>	<b>0.0677</b>	<b>0.6173</b>	<b>0.7962</b>	<b>1.3300e-003</b>		<b>0.0261</b>	<b>0.0261</b>		<b>0.0246</b>	<b>0.0246</b>	<b>0.0000</b>	<b>114.8001</b>	<b>114.8001</b>	<b>0.0270</b>	<b>0.0000</b>	<b>115.4748</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-003	0.2057	0.0796	9.4000e-004	0.0356	1.4500e-003	0.0370	0.0103	1.3800e-003	0.0117	0.0000	91.2491	91.2491	2.2600e-003	0.0135	95.3165
Worker	0.0384	0.0244	0.3606	1.1800e-003	0.1590	6.5000e-004	0.1597	0.0422	6.0000e-004	0.0428	0.0000	113.2774	113.2774	2.2000e-003	2.5800e-003	114.1000
<b>Total</b>	<b>0.0443</b>	<b>0.2301</b>	<b>0.4402</b>	<b>2.1200e-003</b>	<b>0.1946</b>	<b>2.1000e-003</b>	<b>0.1967</b>	<b>0.0525</b>	<b>1.9800e-003</b>	<b>0.0545</b>	<b>0.0000</b>	<b>204.5265</b>	<b>204.5265</b>	<b>4.4600e-003</b>	<b>0.0160</b>	<b>209.4165</b>

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0596	0.6198	0.8108	1.3300e-003		0.0197	0.0197		0.0188	0.0188	0.0000	114.8000	114.8000	0.0270	0.0000	115.4746
<b>Total</b>	<b>0.0596</b>	<b>0.6198</b>	<b>0.8108</b>	<b>1.3300e-003</b>		<b>0.0197</b>	<b>0.0197</b>		<b>0.0188</b>	<b>0.0188</b>	<b>0.0000</b>	<b>114.8000</b>	<b>114.8000</b>	<b>0.0270</b>	<b>0.0000</b>	<b>115.4746</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-003	0.2057	0.0796	9.4000e-004	0.0333	1.4500e-003	0.0348	9.7200e-003	1.3800e-003	0.0111	0.0000	91.2491	91.2491	2.2600e-003	0.0135	95.3165
Worker	0.0384	0.0244	0.3606	1.1800e-003	0.1466	6.5000e-004	0.1473	0.0392	6.0000e-004	0.0398	0.0000	113.2774	113.2774	2.2000e-003	2.5800e-003	114.1000
<b>Total</b>	<b>0.0443</b>	<b>0.2301</b>	<b>0.4402</b>	<b>2.1200e-003</b>	<b>0.1799</b>	<b>2.1000e-003</b>	<b>0.1820</b>	<b>0.0489</b>	<b>1.9800e-003</b>	<b>0.0509</b>	<b>0.0000</b>	<b>204.5265</b>	<b>204.5265</b>	<b>4.4600e-003</b>	<b>0.0160</b>	<b>209.4165</b>

**3.6 Paving - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
Paving	0.0166					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0258</b>	<b>0.0858</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>20.0193</b>	<b>20.0193</b>	<b>6.4700e-003</b>	<b>0.0000</b>	<b>20.1811</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.7300e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.1716	1.1716	2.0000e-005	3.0000e-005	1.1801
<b>Total</b>	<b>4.0000e-004</b>	<b>2.5000e-004</b>	<b>3.7300e-003</b>	<b>1.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6500e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>1.1716</b>	<b>1.1716</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>1.1801</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811
Paving	0.0166					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0258</b>	<b>0.0858</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>20.0192</b>	<b>20.0192</b>	<b>6.4700e-003</b>	<b>0.0000</b>	<b>20.1811</b>

**Construction P1 - Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.7300e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5200e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1716	1.1716	2.0000e-005	3.0000e-005	1.1801
<b>Total</b>	<b>4.0000e-004</b>	<b>2.5000e-004</b>	<b>3.7300e-003</b>	<b>1.0000e-005</b>	<b>1.5200e-003</b>	<b>1.0000e-005</b>	<b>1.5200e-003</b>	<b>4.1000e-004</b>	<b>1.0000e-005</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.1716</b>	<b>1.1716</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>1.1801</b>

**3.7 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2630					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
<b>Total</b>	<b>0.2647</b>	<b>0.0115</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.5567</b>

**Unmitigated Construction Off-Site**

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.9000e-004	0.0147	5.0000e-005	6.4700e-003	3.0000e-005	6.5000e-003	1.7200e-003	2.0000e-005	1.7400e-003	0.0000	4.6081	4.6081	9.0000e-005	1.0000e-004	4.6416
<b>Total</b>	<b>1.5600e-003</b>	<b>9.9000e-004</b>	<b>0.0147</b>	<b>5.0000e-005</b>	<b>6.4700e-003</b>	<b>3.0000e-005</b>	<b>6.5000e-003</b>	<b>1.7200e-003</b>	<b>2.0000e-005</b>	<b>1.7400e-003</b>	<b>0.0000</b>	<b>4.6081</b>	<b>4.6081</b>	<b>9.0000e-005</b>	<b>1.0000e-004</b>	<b>4.6416</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2630					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
<b>Total</b>	<b>0.2647</b>	<b>0.0115</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.5567</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction P1 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.9000e-004	0.0147	5.0000e-005	5.9600e-003	3.0000e-005	5.9900e-003	1.5900e-003	2.0000e-005	1.6200e-003	0.0000	4.6081	4.6081	9.0000e-005	1.0000e-004	4.6416
<b>Total</b>	<b>1.5600e-003</b>	<b>9.9000e-004</b>	<b>0.0147</b>	<b>5.0000e-005</b>	<b>5.9600e-003</b>	<b>3.0000e-005</b>	<b>5.9900e-003</b>	<b>1.5900e-003</b>	<b>2.0000e-005</b>	<b>1.6200e-003</b>	<b>0.0000</b>	<b>4.6081</b>	<b>4.6081</b>	<b>9.0000e-005</b>	<b>1.0000e-004</b>	<b>4.6416</b>



**Construction P1 - Mitigated**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.07	-0.00	-0.01	0.00	0.23	0.22	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.61	0.27	-0.25	0.00	0.81	0.80	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.64	0.30	-0.38	0.00	0.91	0.90	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.70	0.51	-0.27	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	Tier 4 Interim	5	5	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	Tier 4 Interim	1	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	Tier 4 Interim	6	6	No Change	0.00
Scrapers	Diesel	Tier 4 Interim	2	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	9	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

**Construction P1 - Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	1.71000E-003	1.14600E-002	1.80900E-002	3.00000E-005	5.20000E-004	5.20000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.40000E-004	0.00000E+000	2.55674E+000
Concrete/Industrial Saws	2.95000E-003	2.26900E-002	3.64500E-002	6.00000E-005	9.30000E-004	9.30000E-004	0.00000E+000	5.37657E+000	5.37657E+000	2.40000E-004	0.00000E+000	5.38248E+000
Cranes	4.10600E-002	4.15790E-001	2.27910E-001	7.60000E-004	1.76700E-002	1.62600E-002	0.00000E+000	6.65383E+001	6.65383E+001	2.15200E-002	0.00000E+000	6.70763E+001
Excavators	1.00300E-002	7.33000E-002	1.95560E-001	3.10000E-004	3.59000E-003	3.31000E-003	0.00000E+000	2.72339E+001	2.72339E+001	8.81000E-003	0.00000E+000	2.74541E+001
Forklifts	3.91000E-002	3.68340E-001	5.10190E-001	6.90000E-004	1.97200E-002	1.81400E-002	0.00000E+000	6.04311E+001	6.04311E+001	1.95400E-002	0.00000E+000	6.09197E+001
Generator Sets	3.99600E-002	3.59320E-001	5.48920E-001	9.90000E-004	1.43100E-002	1.43100E-002	0.00000E+000	8.47811E+001	8.47811E+001	3.13000E-003	0.00000E+000	8.48594E+001
Graders	4.67000E-003	5.18500E-002	2.39100E-002	1.00000E-004	1.67000E-003	1.54000E-003	0.00000E+000	8.71223E+000	8.71223E+000	2.82000E-003	0.00000E+000	8.78268E+000
Pavers	3.48000E-003	3.16600E-002	5.79200E-002	9.00000E-005	1.48000E-003	1.36000E-003	0.00000E+000	8.25526E+000	8.25526E+000	2.67000E-003	0.00000E+000	8.32201E+000
Paving Equipment	2.94000E-003	2.52900E-002	5.09300E-002	8.00000E-005	1.25000E-003	1.15000E-003	0.00000E+000	7.15437E+000	7.15437E+000	2.31000E-003	0.00000E+000	7.21222E+000
Rollers	2.74000E-003	2.88600E-002	3.69300E-002	5.00000E-005	1.45000E-003	1.34000E-003	0.00000E+000	4.60962E+000	4.60962E+000	1.49000E-003	0.00000E+000	4.64689E+000
Rubber Tired Dozers	3.24000E-002	3.31560E-001	1.49890E-001	4.30000E-004	1.45100E-002	1.33500E-002	0.00000E+000	3.75103E+001	3.75103E+001	1.21300E-002	0.00000E+000	3.78138E+001
Scrapers	2.01500E-002	1.91120E-001	1.61420E-001	4.50000E-004	7.52000E-003	6.92000E-003	0.00000E+000	3.99564E+001	3.99564E+001	1.29200E-002	0.00000E+000	4.02795E+001
Tractors/Loaders/Backhoes	5.86300E-002	5.92450E-001	9.89410E-001	1.38000E-003	2.40100E-002	2.20900E-002	0.00000E+000	1.21597E+002	1.21597E+002	3.93300E-002	0.00000E+000	1.22580E+002
Welders	3.29700E-002	2.01310E-001	2.47750E-001	3.80000E-004	6.13000E-003	6.13000E-003	0.00000E+000	2.82331E+001	2.82331E+001	2.68000E-003	0.00000E+000	2.83002E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr						Mitigated mt/yr						
Air Compressors	1.71000E-003	1.14600E-002	1.80900E-002	3.00000E-005	5.20000E-004	5.20000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.40000E-004	0.00000E+000	2.55673E+000
Concrete/Industrial Saws	2.95000E-003	2.26900E-002	3.64500E-002	6.00000E-005	9.30000E-004	9.30000E-004	0.00000E+000	5.37657E+000	5.37657E+000	2.40000E-004	0.00000E+000	5.38248E+000
Cranes	4.10600E-002	4.15790E-001	2.27910E-001	7.60000E-004	1.76700E-002	1.62600E-002	0.00000E+000	6.65382E+001	6.65382E+001	2.15200E-002	0.00000E+000	6.70762E+001
Excavators	3.81000E-003	1.36600E-001	2.35080E-001	3.10000E-004	5.10000E-004	5.10000E-004	0.00000E+000	2.72339E+001	2.72339E+001	8.81000E-003	0.00000E+000	2.74541E+001
Forklifts	3.91000E-002	3.68340E-001	5.10190E-001	6.90000E-004	1.97200E-002	1.81400E-002	0.00000E+000	6.04310E+001	6.04310E+001	1.95400E-002	0.00000E+000	6.09196E+001
Generator Sets	3.99600E-002	3.59320E-001	5.48920E-001	9.90000E-004	1.43100E-002	1.43100E-002	0.00000E+000	8.47810E+001	8.47810E+001	3.13000E-003	0.00000E+000	8.48593E+001
Graders	1.62000E-003	2.61700E-002	5.27400E-002	1.00000E-004	1.60000E-004	1.60000E-004	0.00000E+000	8.71222E+000	8.71222E+000	2.82000E-003	0.00000E+000	8.78267E+000
Pavers	3.48000E-003	3.16600E-002	5.79200E-002	9.00000E-005	1.48000E-003	1.36000E-003	0.00000E+000	8.25525E+000	8.25525E+000	2.67000E-003	0.00000E+000	8.32200E+000
Paving Equipment	2.94000E-003	2.52900E-002	5.09300E-002	8.00000E-005	1.25000E-003	1.15000E-003	0.00000E+000	7.15437E+000	7.15437E+000	2.31000E-003	0.00000E+000	7.21221E+000

**Construction P1 - Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Rollers	2.74000E-003	2.88600E-002	3.69300E-002	5.00000E-005	1.45000E-003	1.34000E-003	0.00000E+000	4.60962E+000	4.60962E+000	1.49000E-003	0.00000E+000	4.64689E+000
Rubber Tired Dozers	6.97000E-003	1.12390E-001	2.26530E-001	4.30000E-004	7.00000E-004	7.00000E-004	0.00000E+000	3.75102E+001	3.75102E+001	1.21300E-002	0.00000E+000	3.78135E+001
Scrapers	7.46000E-003	1.20240E-001	2.42340E-001	4.50000E-004	7.50000E-004	7.50000E-004	0.00000E+000	3.99564E+001	3.99564E+001	1.29200E-002	0.00000E+000	4.02794E+001
Tractors/Loaders/Bac hoes	3.09000E-002	6.01100E-001	1.03929E+000	1.38000E-003	2.25000E-003	2.25000E-003	0.00000E+000	1.21596E+002	1.21596E+002	3.93300E-002	0.00000E+000	1.22580E+002
Welders	3.29700E-002	2.01310E-001	2.47750E-001	3.80000E-004	6.13000E-003	6.13000E-003	0.00000E+000	2.82331E+001	2.82331E+001	2.68000E-003	0.00000E+000	2.83001E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.91123E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85788E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20231E-006	1.20231E-006	0.00000E+000	0.00000E+000	1.19267E-006
Excavators	6.20140E-001	-8.63574E-001	-2.02086E-001	0.00000E+000	8.57939E-001	8.45921E-001	0.00000E+000	1.10157E-006	1.10157E-006	0.00000E+000	0.00000E+000	1.09273E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15834E-006	1.15834E-006	0.00000E+000	0.00000E+000	1.31320E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17842E-006
Graders	6.53105E-001	4.95275E-001	-1.20577E+000	0.00000E+000	9.04192E-001	8.96104E-001	0.00000E+000	1.14781E-006	1.14781E-006	0.00000E+000	0.00000E+000	1.13860E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21135E-006	1.21135E-006	0.00000E+000	0.00000E+000	1.20163E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.38654E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	7.84877E-001	6.61027E-001	-5.11308E-001	0.00000E+000	9.51757E-001	9.47566E-001	0.00000E+000	1.33297E-006	1.33297E-006	0.00000E+000	0.00000E+000	1.32228E-006
Scrapers	6.29777E-001	3.70866E-001	-5.01301E-001	0.00000E+000	9.00266E-001	8.91618E-001	0.00000E+000	1.25136E-006	1.25136E-006	0.00000E+000	0.00000E+000	1.24133E-006
Tractors/Loaders/Bac hoes	4.72966E-001	-1.46004E-002	-5.04139E-002	0.00000E+000	9.06289E-001	8.98144E-001	0.00000E+000	1.23359E-006	1.23359E-006	0.00000E+000	0.00000E+000	1.22369E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06258E-006	1.06258E-006	0.00000E+000	0.00000E+000	1.06006E-006

### Construction P1 - Mitigated

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00	
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day) 3.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00	
Yes	Clean Paved Road	% PM Reduction	9.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.08	0.08
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.59	0.16	0.55	0.15	0.08	0.07
Demolition	Fugitive Dust	0.03	0.00	0.01	0.00	0.63	0.63
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Grading	Fugitive Dust	0.14	0.05	0.05	0.02	0.63	0.63
Grading	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Site Preparation	Fugitive Dust	0.10	0.05	0.04	0.02	0.63	0.63
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.07	0.06

# CalEEMod Output: Phase 2 Construction

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Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction P2**

**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	131.59	1000sqft	1.23	131,587.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2031

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information on provided by the College District.

Demolition -

Trips and VMT - See Construction Phase 2 assumptions file in the AQ/GHG appendix of the DEIR.

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.02	1.23
tblTripsAndVMT	HaulingTripNumber	367.00	368.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

**2.0 Emissions Summary**

Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4088	10.0754	13.9536	0.0387	7.2328	0.2363	7.4206	3.4655	0.2353	3.6532	0.0000	3,808.0554	3,808.0554	0.1599	0.1647	3,861.1320
2031	122.1374	7.9988	13.7272	0.0316	0.7557	0.1733	0.8900	0.2036	0.1732	0.3376	0.0000	2,994.6746	2,994.6746	0.1115	0.0619	3,015.9020
Maximum	122.1374	10.0754	13.9536	0.0387	7.2328	0.2363	7.4206	3.4655	0.2353	3.6532	0.0000	3,808.0554	3,808.0554	0.1599	0.1647	3,861.1320

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4088	10.0754	13.9536	0.0387	3.1668	0.2363	3.3546	1.5020	0.2353	1.6897	0.0000	3,808.0554	3,808.0554	0.1599	0.1647	3,861.1320
2031	122.1374	7.9988	13.7272	0.0316	0.6986	0.1733	0.8329	0.1896	0.1732	0.3236	0.0000	2,994.6746	2,994.6746	0.1115	0.0619	3,015.9020
Maximum	122.1374	10.0754	13.9536	0.0387	3.1668	0.2363	3.3546	1.5020	0.2353	1.6897	0.0000	3,808.0554	3,808.0554	0.1599	0.1647	3,861.1320

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.61	0.00	49.61	53.89	0.00	49.55	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail



Construction P2 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2030	8/28/2030	5	20	
2	Site Preparation	Site Preparation	8/29/2030	8/30/2030	5	2	
3	Grading	Grading	8/31/2030	9/5/2030	5	4	
4	Building Construction	Building Construction	9/6/2030	6/12/2031	5	200	
5	Paving	Paving	6/13/2031	6/26/2031	5	10	
6	Architectural Coating	Architectural Coating	6/27/2031	7/10/2031	5	10	

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 197,381; Non-Residential Outdoor: 65,794; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Construction P2 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	368.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	55.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9706	0.0000	3.9706	0.6012	0.0000	0.6012			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148		2,662.1297	2,662.1297	0.1177		2,665.0713
<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>3.9706</b>	<b>0.2148</b>	<b>4.1853</b>	<b>0.6012</b>	<b>0.2148</b>	<b>0.8159</b>		<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.1177</b>		<b>2,665.0713</b>

Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0421	1.9157	0.6083	8.8600e-003	0.3222	0.0200	0.3422	0.0883	0.0192	0.1075		964.0417	964.0417	0.0389	0.1527	1,010.5290
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.6000e-004	8.3400e-003		67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783
Worker	0.0317	0.0155	0.3226	1.0600e-003	0.1453	4.8000e-004	0.1458	0.0385	4.4000e-004	0.0390		114.7878	114.7878	1.6400e-003	2.1000e-003	115.4534
<b>Total</b>	<b>0.0780</b>	<b>2.0677</b>	<b>0.9851</b>	<b>0.0106</b>	<b>0.4931</b>	<b>0.0215</b>	<b>0.5146</b>	<b>0.1343</b>	<b>0.0206</b>	<b>0.1548</b>		<b>1,145.9257</b>	<b>1,145.9257</b>	<b>0.0422</b>	<b>0.1647</b>	<b>1,196.0607</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6974	0.0000	1.6974	0.2570	0.0000	0.2570			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148	0.0000	2,662.1297	2,662.1297	0.1177		2,665.0713
<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>1.6974</b>	<b>0.2148</b>	<b>1.9122</b>	<b>0.2570</b>	<b>0.2148</b>	<b>0.4718</b>	<b>0.0000</b>	<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.1177</b>		<b>2,665.0713</b>

**Mitigated Construction Off-Site**

Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0421	1.9157	0.6083	8.8600e-003	0.3003	0.0200	0.3203	0.0830	0.0192	0.1021		964.0417	964.0417	0.0389	0.1527	1,010.5290
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.6000e-004	7.9400e-003		67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783
Worker	0.0317	0.0155	0.3226	1.0600e-003	0.1339	4.8000e-004	0.1344	0.0358	4.4000e-004	0.0362		114.7878	114.7878	1.6400e-003	2.1000e-003	115.4534
<b>Total</b>	<b>0.0780</b>	<b>2.0677</b>	<b>0.9851</b>	<b>0.0106</b>	<b>0.4582</b>	<b>0.0215</b>	<b>0.4797</b>	<b>0.1257</b>	<b>0.0206</b>	<b>0.1463</b>		<b>1,145.9257</b>	<b>1,145.9257</b>	<b>0.0422</b>	<b>0.1647</b>	<b>1,196.0607</b>

3.3 Site Preparation - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567		1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>6.2662</b>	<b>0.1567</b>	<b>6.4229</b>	<b>3.0041</b>	<b>0.1567</b>	<b>3.1607</b>		<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction P2 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.6000e-004	8.3400e-003	67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783	
Worker	0.0195	9.5400e-003	0.1985	6.5000e-004	0.0894	2.9000e-004	0.0897	0.0237	2.7000e-004	0.0240	70.6387	70.6387	1.0100e-003	1.2900e-003	71.0482	
<b>Total</b>	<b>0.0237</b>	<b>0.1460</b>	<b>0.2528</b>	<b>1.2800e-003</b>	<b>0.1151</b>	<b>1.3000e-003</b>	<b>0.1163</b>	<b>0.0311</b>	<b>1.2300e-003</b>	<b>0.0323</b>	<b>137.7349</b>	<b>137.7349</b>	<b>2.6400e-003</b>	<b>0.0112</b>	<b>141.1265</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6788	0.0000	2.6788	1.2843	0.0000	1.2843			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567	0.0000	1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>2.6788</b>	<b>0.1567</b>	<b>2.8355</b>	<b>1.2843</b>	<b>0.1567</b>	<b>1.4409</b>	<b>0.0000</b>	<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.6000e-004	7.9400e-003	67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783	
Worker	0.0195	9.5400e-003	0.1985	6.5000e-004	0.0824	2.9000e-004	0.0827	0.0220	2.7000e-004	0.0223	70.6387	70.6387	1.0100e-003	1.2900e-003	71.0482	

Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.0237	0.1460	0.2528	1.2800e-003	0.1064	1.3000e-003	0.1077	0.0290	1.2300e-003	0.0302		137.7349	137.7349	2.6400e-003	0.0112	141.1265
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3.4 Grading - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859		2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>7.0826</b>	<b>0.1859</b>	<b>7.2685</b>	<b>3.4247</b>	<b>0.1859</b>	<b>3.6107</b>		<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3000e-003	0.2046	0.0814	9.4000e-004	0.0384	1.5100e-003	0.0400	0.0111	1.4500e-003	0.0125		100.6444	100.6444	2.4400e-003	0.0148	105.1174
Worker	0.0244	0.0119	0.2481	8.2000e-004	0.1116	3.7000e-004	0.1121	0.0296	3.4000e-004	0.0300		88.2983	88.2983	1.2600e-003	1.6100e-003	88.8103
<b>Total</b>	<b>0.0307</b>	<b>0.2166</b>	<b>0.3295</b>	<b>1.7600e-003</b>	<b>0.1502</b>	<b>1.8800e-003</b>	<b>0.1521</b>	<b>0.0407</b>	<b>1.7900e-003</b>	<b>0.0425</b>		<b>188.9427</b>	<b>188.9427</b>	<b>3.7000e-003</b>	<b>0.0164</b>	<b>193.9277</b>

Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859	0.0000	2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>3.0278</b>	<b>0.1859</b>	<b>3.2137</b>	<b>1.4641</b>	<b>0.1859</b>	<b>1.6500</b>	<b>0.0000</b>	<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3000e-003	0.2046	0.0814	9.4000e-004	0.0360	1.5100e-003	0.0375	0.0105	1.4500e-003	0.0119		100.6444	100.6444	2.4400e-003	0.0148	105.1174
Worker	0.0244	0.0119	0.2481	8.2000e-004	0.1030	3.7000e-004	0.1034	0.0275	3.4000e-004	0.0278		88.2983	88.2983	1.2600e-003	1.6100e-003	88.8103
<b>Total</b>	<b>0.0307</b>	<b>0.2166</b>	<b>0.3295</b>	<b>1.7600e-003</b>	<b>0.1390</b>	<b>1.8800e-003</b>	<b>0.1409</b>	<b>0.0380</b>	<b>1.7900e-003</b>	<b>0.0397</b>		<b>188.9427</b>	<b>188.9427</b>	<b>3.7000e-003</b>	<b>0.0164</b>	<b>193.9277</b>

**3.5 Building Construction - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day				
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.7503	0.2985	3.4400e-003	0.1409	5.5400e-003	0.1465	0.0406	5.3000e-003	0.0459		369.0293	369.0293	8.9500e-003	0.0543	385.4306
Worker	0.1341	0.0656	1.3647	4.4900e-003	0.6148	2.0200e-003	0.6168	0.1630	1.8600e-003	0.1649		485.6408	485.6408	6.9300e-003	8.8700e-003	488.4565
<b>Total</b>	<b>0.1572</b>	<b>0.8159</b>	<b>1.6632</b>	<b>7.9300e-003</b>	<b>0.7557</b>	<b>7.5600e-003</b>	<b>0.7633</b>	<b>0.2036</b>	<b>7.1600e-003</b>	<b>0.2108</b>		<b>854.6701</b>	<b>854.6701</b>	<b>0.0159</b>	<b>0.0632</b>	<b>873.8872</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>



Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.7503	0.2985	3.4400e-003	0.1319	5.5400e-003	0.1375	0.0384	5.3000e-003	0.0437		369.0293	369.0293	8.9500e-003	0.0543	385.4308
Worker	0.1341	0.0656	1.3647	4.4900e-003	0.5667	2.0200e-003	0.5687	0.1512	1.8600e-003	0.1531		485.6408	485.6408	6.9300e-003	8.8700e-003	488.4565
<b>Total</b>	<b>0.1572</b>	<b>0.8159</b>	<b>1.6632</b>	<b>7.9300e-003</b>	<b>0.6986</b>	<b>7.5600e-003</b>	<b>0.7061</b>	<b>0.1896</b>	<b>7.1600e-003</b>	<b>0.1968</b>		<b>854.6701</b>	<b>854.6701</b>	<b>0.0159</b>	<b>0.0632</b>	<b>873.8872</b>

**3.5 Building Construction - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270		2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>		<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0230	0.7497	0.2977	3.3900e-003	0.1409	5.4200e-003	0.1464	0.0406	5.1800e-003	0.0458	362.6721	362.6721	8.7300e-003	0.0533	378.7757	
Worker	0.1253	0.0610	1.3195	4.4100e-003	0.6148	1.9000e-003	0.6167	0.1630	1.7500e-003	0.1648	479.3459	479.3459	6.4200e-003	8.5700e-003	482.0608	
<b>Total</b>	<b>0.1483</b>	<b>0.8107</b>	<b>1.6172</b>	<b>7.8000e-003</b>	<b>0.7557</b>	<b>7.3200e-003</b>	<b>0.7630</b>	<b>0.2036</b>	<b>6.9300e-003</b>	<b>0.2106</b>	<b>842.0180</b>	<b>842.0180</b>	<b>0.0152</b>	<b>0.0619</b>	<b>860.8365</b>	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.7497	0.2977	3.3900e-003	0.1319	5.4200e-003	0.1373	0.0384	5.1800e-003	0.0436	362.6721	362.6721	8.7300e-003	0.0533	378.7757	
Worker	0.1253	0.0610	1.3195	4.4100e-003	0.5667	1.9000e-003	0.5686	0.1512	1.7500e-003	0.1530	479.3459	479.3459	6.4200e-003	8.5700e-003	482.0608	

Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1483	0.8107	1.6172	7.8000e-003	0.6986	7.3200e-003	0.7059	0.1896	6.9300e-003	0.1965		842.0180	842.0180	0.0152	0.0619	860.8365
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3.6 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728		1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>		<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0144	0.3119	1.0400e-003	0.1453	4.5000e-004	0.1458	0.0385	4.1000e-004	0.0390		113.2999	113.2999	1.5200e-003	2.0300e-003	113.9416
<b>Total</b>	<b>0.0296</b>	<b>0.0144</b>	<b>0.3119</b>	<b>1.0400e-003</b>	<b>0.1453</b>	<b>4.5000e-004</b>	<b>0.1458</b>	<b>0.0385</b>	<b>4.1000e-004</b>	<b>0.0390</b>		<b>113.2999</b>	<b>113.2999</b>	<b>1.5200e-003</b>	<b>2.0300e-003</b>	<b>113.9416</b>

Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728	0.0000	1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>	<b>0.0000</b>	<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0144	0.3119	1.0400e-003	0.1339	4.5000e-004	0.1344	0.0358	4.1000e-004	0.0362		113.2999	113.2999	1.5200e-003	2.0300e-003	113.9416
<b>Total</b>	<b>0.0296</b>	<b>0.0144</b>	<b>0.3119</b>	<b>1.0400e-003</b>	<b>0.1339</b>	<b>4.5000e-004</b>	<b>0.1344</b>	<b>0.0358</b>	<b>4.1000e-004</b>	<b>0.0362</b>		<b>113.2999</b>	<b>113.2999</b>	<b>1.5200e-003</b>	<b>2.0300e-003</b>	<b>113.9416</b>

**3.7 Architectural Coating - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	121.9816					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
<b>Total</b>	<b>122.1124</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.9700e-003</b>		<b>0.0203</b>	<b>0.0203</b>		<b>0.0203</b>	<b>0.0203</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0114</b>		<b>281.7328</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0122	0.2639	8.8000e-004	0.1230	3.8000e-004	0.1233	0.0326	3.5000e-004	0.0330		95.8692	95.8692	1.2800e-003	1.7100e-003	96.4122
<b>Total</b>	<b>0.0251</b>	<b>0.0122</b>	<b>0.2639</b>	<b>8.8000e-004</b>	<b>0.1230</b>	<b>3.8000e-004</b>	<b>0.1233</b>	<b>0.0326</b>	<b>3.5000e-004</b>	<b>0.0330</b>		<b>95.8692</b>	<b>95.8692</b>	<b>1.2800e-003</b>	<b>1.7100e-003</b>	<b>96.4122</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	121.9816					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
<b>Total</b>	<b>122.1124</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.9700e-003</b>		<b>0.0203</b>	<b>0.0203</b>		<b>0.0203</b>	<b>0.0203</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0114</b>		<b>281.7328</b>

Construction P2 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0122	0.2639	8.8000e-004	0.1133	3.8000e-004	0.1137	0.0303	3.5000e-004	0.0306		95.8692	95.8692	1.2800e-003	1.7100e-003	96.4122
<b>Total</b>	<b>0.0251</b>	<b>0.0122</b>	<b>0.2639</b>	<b>8.8000e-004</b>	<b>0.1133</b>	<b>3.8000e-004</b>	<b>0.1137</b>	<b>0.0303</b>	<b>3.5000e-004</b>	<b>0.0306</b>		<b>95.8692</b>	<b>95.8692</b>	<b>1.2800e-003</b>	<b>1.7100e-003</b>	<b>96.4122</b>

Construction P2 - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P2**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	131.59	1000sqft	1.23	131,587.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2031

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Based on information on provided by the College District.  
 Demolition -  
 Trips and VMT - See Construction Phase 2 assumptions file in the AQ/GHG appendix of the DEIR.  
 Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.02	1.23
tblTripsAndVMT	HaulingTripNumber	367.00	368.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

**2.0 Emissions Summary**

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4044	10.1886	13.9106	0.0386	7.2328	0.2363	7.4206	3.4655	0.2353	3.6532	0.0000	3,799.0642	3,799.0642	0.1597	0.1650	3,852.2373
2031	122.1369	8.0442	13.5090	0.0312	0.7557	0.1733	0.8901	0.2036	0.1732	0.3376	0.0000	2,950.9452	2,950.9452	0.1115	0.0623	2,972.2894
<b>Maximum</b>	<b>122.1369</b>	<b>10.1886</b>	<b>13.9106</b>	<b>0.0386</b>	<b>7.2328</b>	<b>0.2363</b>	<b>7.4206</b>	<b>3.4655</b>	<b>0.2353</b>	<b>3.6532</b>	<b>0.0000</b>	<b>3,799.0642</b>	<b>3,799.0642</b>	<b>0.1597</b>	<b>0.1650</b>	<b>3,852.2373</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4044	10.1886	13.9106	0.0386	3.1668	0.2363	3.3546	1.5020	0.2353	1.6897	0.0000	3,799.0642	3,799.0642	0.1597	0.1650	3,852.2373
2031	122.1369	8.0442	13.5090	0.0312	0.6986	0.1733	0.8329	0.1896	0.1732	0.3236	0.0000	2,950.9452	2,950.9452	0.1115	0.0623	2,972.2894
<b>Maximum</b>	<b>122.1369</b>	<b>10.1886</b>	<b>13.9106</b>	<b>0.0386</b>	<b>3.1668</b>	<b>0.2363</b>	<b>3.3546</b>	<b>1.5020</b>	<b>0.2353</b>	<b>1.6897</b>	<b>0.0000</b>	<b>3,799.0642</b>	<b>3,799.0642</b>	<b>0.1597</b>	<b>0.1650</b>	<b>3,852.2373</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>51.61</b>	<b>0.00</b>	<b>49.61</b>	<b>53.89</b>	<b>0.00</b>	<b>49.55</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

3.0 Construction Detail



Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2030	8/28/2030	5	20	
2	Site Preparation	Site Preparation	8/29/2030	8/30/2030	5	2	
3	Grading	Grading	8/31/2030	9/5/2030	5	4	
4	Building Construction	Building Construction	9/6/2030	6/12/2031	5	200	
5	Paving	Paving	6/13/2031	6/26/2031	5	10	
6	Architectural Coating	Architectural Coating	6/27/2031	7/10/2031	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 197,381; Non-Residential Outdoor: 65,794; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Construction P2 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	368.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	55.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9706	0.0000	3.9706	0.6012	0.0000	0.6012			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148		2,662.1297	2,662.1297	0.1177		2,665.0713
<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>3.9706</b>	<b>0.2148</b>	<b>4.1853</b>	<b>0.6012</b>	<b>0.2148</b>	<b>0.8159</b>		<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.1177</b>		<b>2,665.0713</b>

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0388	2.0205	0.6191	8.8700e-003	0.3222	0.0201	0.3422	0.0883	0.0192	0.1075		965.5717	965.5717	0.0388	0.1530	1,012.1272
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.7000e-004	8.3500e-003		67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579
Worker	0.0310	0.0163	0.2670	9.6000e-004	0.1453	4.8000e-004	0.1458	0.0385	4.4000e-004	0.0390		104.0957	104.0957	1.6700e-003	2.1600e-003	104.7809
<b>Total</b>	<b>0.0737</b>	<b>2.1809</b>	<b>0.9420</b>	<b>0.0105</b>	<b>0.4931</b>	<b>0.0215</b>	<b>0.5147</b>	<b>0.1343</b>	<b>0.0206</b>	<b>0.1549</b>		<b>1,136.9345</b>	<b>1,136.9345</b>	<b>0.0420</b>	<b>0.1650</b>	<b>1,187.1660</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6974	0.0000	1.6974	0.2570	0.0000	0.2570			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148	0.0000	2,662.1297	2,662.1297	0.1177		2,665.0713
<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>1.6974</b>	<b>0.2148</b>	<b>1.9122</b>	<b>0.2570</b>	<b>0.2148</b>	<b>0.4718</b>	<b>0.0000</b>	<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.1177</b>		<b>2,665.0713</b>

**Mitigated Construction Off-Site**

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0388	2.0205	0.6191	8.8700e-003	0.3003	0.0201	0.3203	0.0830	0.0192	0.1022		965.5717	965.5717	0.0388	0.1530	1,012.1272
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.7000e-004	7.9400e-003		67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579
Worker	0.0310	0.0163	0.2670	9.6000e-004	0.1339	4.8000e-004	0.1344	0.0358	4.4000e-004	0.0362		104.0957	104.0957	1.6700e-003	2.1600e-003	104.7809
<b>Total</b>	<b>0.0737</b>	<b>2.1809</b>	<b>0.9420</b>	<b>0.0105</b>	<b>0.4582</b>	<b>0.0215</b>	<b>0.4797</b>	<b>0.1257</b>	<b>0.0206</b>	<b>0.1463</b>		<b>1,136.9345</b>	<b>1,136.9345</b>	<b>0.0420</b>	<b>0.1650</b>	<b>1,187.1660</b>

3.3 Site Preparation - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567		1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>6.2662</b>	<b>0.1567</b>	<b>6.4229</b>	<b>3.0041</b>	<b>0.1567</b>	<b>3.1607</b>		<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction P2 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.7000e-004	8.3500e-003		67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579
Worker	0.0191	0.0100	0.1643	5.9000e-004	0.0894	2.9000e-004	0.0897	0.0237	2.7000e-004	0.0240		64.0589	64.0589	1.0300e-003	1.3300e-003	64.4805
<b>Total</b>	<b>0.0229</b>	<b>0.1542</b>	<b>0.2203</b>	<b>1.2200e-003</b>	<b>0.1151</b>	<b>1.3000e-003</b>	<b>0.1164</b>	<b>0.0311</b>	<b>1.2400e-003</b>	<b>0.0323</b>		<b>131.3260</b>	<b>131.3260</b>	<b>2.6400e-003</b>	<b>0.0112</b>	<b>134.7384</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6788	0.0000	2.6788	1.2843	0.0000	1.2843			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567	0.0000	1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>2.6788</b>	<b>0.1567</b>	<b>2.8355</b>	<b>1.2843</b>	<b>0.1567</b>	<b>1.4409</b>	<b>0.0000</b>	<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.7000e-004	7.9400e-003		67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579
Worker	0.0191	0.0100	0.1643	5.9000e-004	0.0824	2.9000e-004	0.0827	0.0220	2.7000e-004	0.0223		64.0589	64.0589	1.0300e-003	1.3300e-003	64.4805

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.0229	0.1542	0.2203	1.2200e-003	0.1064	1.3000e-003	0.1077	0.0290	1.2400e-003	0.0302		131.3260	131.3260	2.6400e-003	0.0112	134.7384
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3.4 Grading - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859		2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>7.0826</b>	<b>0.1859</b>	<b>7.2685</b>	<b>3.4247</b>	<b>0.1859</b>	<b>3.6107</b>		<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8000e-003	0.2162	0.0840	9.4000e-004	0.0384	1.5200e-003	0.0400	0.0111	1.4500e-003	0.0125		100.9007	100.9007	2.4200e-003	0.0149	105.3868
Worker	0.0238	0.0125	0.2054	7.4000e-004	0.1116	3.7000e-004	0.1121	0.0296	3.4000e-004	0.0300		80.0736	80.0736	1.2800e-003	1.6600e-003	80.6007
<b>Total</b>	<b>0.0296</b>	<b>0.2287</b>	<b>0.2894</b>	<b>1.6800e-003</b>	<b>0.1502</b>	<b>1.8900e-003</b>	<b>0.1521</b>	<b>0.0407</b>	<b>1.7900e-003</b>	<b>0.0425</b>		<b>180.9742</b>	<b>180.9742</b>	<b>3.7000e-003</b>	<b>0.0165</b>	<b>185.9875</b>

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859	0.0000	2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>3.0278</b>	<b>0.1859</b>	<b>3.2137</b>	<b>1.4641</b>	<b>0.1859</b>	<b>1.6500</b>	<b>0.0000</b>	<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8000e-003	0.2162	0.0840	9.4000e-004	0.0360	1.5200e-003	0.0375	0.0105	1.4500e-003	0.0119		100.9007	100.9007	2.4200e-003	0.0149	105.3868
Worker	0.0238	0.0125	0.2054	7.4000e-004	0.1030	3.7000e-004	0.1034	0.0275	3.4000e-004	0.0278		80.0736	80.0736	1.2800e-003	1.6600e-003	80.6007
<b>Total</b>	<b>0.0296</b>	<b>0.2287</b>	<b>0.2894</b>	<b>1.6800e-003</b>	<b>0.1390</b>	<b>1.8900e-003</b>	<b>0.1409</b>	<b>0.0380</b>	<b>1.7900e-003</b>	<b>0.0397</b>		<b>180.9742</b>	<b>180.9742</b>	<b>3.7000e-003</b>	<b>0.0165</b>	<b>185.9875</b>

**3.5 Building Construction - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day				
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0213	0.7928	0.3080	3.4500e-003	0.1409	5.5600e-003	0.1465	0.0406	5.3200e-003	0.0459		369.9691	369.9691	8.8600e-003	0.0545	386.4182
Worker	0.1311	0.0688	1.1295	4.0700e-003	0.6148	2.0200e-003	0.6168	0.1630	1.8600e-003	0.1649		440.4048	440.4048	7.0500e-003	9.1400e-003	443.3037
<b>Total</b>	<b>0.1523</b>	<b>0.8616</b>	<b>1.4374</b>	<b>7.5200e-003</b>	<b>0.7557</b>	<b>7.5800e-003</b>	<b>0.7633</b>	<b>0.2036</b>	<b>7.1800e-003</b>	<b>0.2108</b>		<b>810.3738</b>	<b>810.3738</b>	<b>0.0159</b>	<b>0.0636</b>	<b>829.7219</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>



Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0213	0.7928	0.3080	3.4500e-003	0.1319	5.5600e-003	0.1375	0.0384	5.3200e-003	0.0437		369.9691	369.9691	8.8600e-003	0.0545	386.4182
Worker	0.1311	0.0688	1.1295	4.0700e-003	0.5667	2.0200e-003	0.5687	0.1512	1.8600e-003	0.1531		440.4048	440.4048	7.0500e-003	9.1400e-003	443.3037
<b>Total</b>	<b>0.1523</b>	<b>0.8616</b>	<b>1.4374</b>	<b>7.5200e-003</b>	<b>0.6986</b>	<b>7.5800e-003</b>	<b>0.7062</b>	<b>0.1896</b>	<b>7.1800e-003</b>	<b>0.1968</b>		<b>810.3738</b>	<b>810.3738</b>	<b>0.0159</b>	<b>0.0636</b>	<b>829.7219</b>

**3.5 Building Construction - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270		2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>		<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0211	0.7922	0.3071	3.4000e-003	0.1409	5.4300e-003	0.1464	0.0406	5.2000e-003	0.0458	363.6002	363.6002	8.6400e-003	0.0535	379.7510	
Worker	0.1227	0.0639	1.0919	3.9900e-003	0.6148	1.9000e-003	0.6167	0.1630	1.7500e-003	0.1648	434.6884	434.6884	6.5400e-003	8.8300e-003	437.4830	
<b>Total</b>	<b>0.1438</b>	<b>0.8561</b>	<b>1.3990</b>	<b>7.3900e-003</b>	<b>0.7557</b>	<b>7.3300e-003</b>	<b>0.7630</b>	<b>0.2036</b>	<b>6.9500e-003</b>	<b>0.2106</b>	<b>798.2886</b>	<b>798.2886</b>	<b>0.0152</b>	<b>0.0623</b>	<b>817.2340</b>	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0211	0.7922	0.3071	3.4000e-003	0.1319	5.4300e-003	0.1373	0.0384	5.2000e-003	0.0436	363.6002	363.6002	8.6400e-003	0.0535	379.7510	
Worker	0.1227	0.0639	1.0919	3.9900e-003	0.5667	1.9000e-003	0.5686	0.1512	1.7500e-003	0.1530	434.6884	434.6884	6.5400e-003	8.8300e-003	437.4830	

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1438	0.8561	1.3990	7.3900e-003	0.6986	7.3300e-003	0.7059	0.1896	6.9500e-003	0.1965		798.2886	798.2886	0.0152	0.0623	817.2340
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3.6 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728		1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>		<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0151	0.2581	9.4000e-004	0.1453	4.5000e-004	0.1458	0.0385	4.1000e-004	0.0390		102.7445	102.7445	1.5500e-003	2.0900e-003	103.4051
<b>Total</b>	<b>0.0290</b>	<b>0.0151</b>	<b>0.2581</b>	<b>9.4000e-004</b>	<b>0.1453</b>	<b>4.5000e-004</b>	<b>0.1458</b>	<b>0.0385</b>	<b>4.1000e-004</b>	<b>0.0390</b>		<b>102.7445</b>	<b>102.7445</b>	<b>1.5500e-003</b>	<b>2.0900e-003</b>	<b>103.4051</b>

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728	0.0000	1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>	<b>0.0000</b>	<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0151	0.2581	9.4000e-004	0.1339	4.5000e-004	0.1344	0.0358	4.1000e-004	0.0362		102.7445	102.7445	1.5500e-003	2.0900e-003	103.4051
<b>Total</b>	<b>0.0290</b>	<b>0.0151</b>	<b>0.2581</b>	<b>9.4000e-004</b>	<b>0.1339</b>	<b>4.5000e-004</b>	<b>0.1344</b>	<b>0.0358</b>	<b>4.1000e-004</b>	<b>0.0362</b>		<b>102.7445</b>	<b>102.7445</b>	<b>1.5500e-003</b>	<b>2.0900e-003</b>	<b>103.4051</b>

**3.7 Architectural Coating - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	121.9816					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
<b>Total</b>	<b>122.1124</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.9700e-003</b>		<b>0.0203</b>	<b>0.0203</b>		<b>0.0203</b>	<b>0.0203</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0114</b>		<b>281.7328</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0245	0.0128	0.2184	8.0000e-004	0.1230	3.8000e-004	0.1233	0.0326	3.5000e-004	0.0330		86.9377	86.9377	1.3100e-003	1.7700e-003	87.4966
<b>Total</b>	<b>0.0245</b>	<b>0.0128</b>	<b>0.2184</b>	<b>8.0000e-004</b>	<b>0.1230</b>	<b>3.8000e-004</b>	<b>0.1233</b>	<b>0.0326</b>	<b>3.5000e-004</b>	<b>0.0330</b>		<b>86.9377</b>	<b>86.9377</b>	<b>1.3100e-003</b>	<b>1.7700e-003</b>	<b>87.4966</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	121.9816					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

Construction P2 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	122.1124	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0245	0.0128	0.2184	8.0000e-004	0.1133	3.8000e-004	0.1137	0.0303	3.5000e-004	0.0306		86.9377	86.9377	1.3100e-003	1.7700e-003	87.4966
<b>Total</b>	<b>0.0245</b>	<b>0.0128</b>	<b>0.2184</b>	<b>8.0000e-004</b>	<b>0.1133</b>	<b>3.8000e-004</b>	<b>0.1137</b>	<b>0.0303</b>	<b>3.5000e-004</b>	<b>0.0306</b>		<b>86.9377</b>	<b>86.9377</b>	<b>1.3100e-003</b>	<b>1.7700e-003</b>	<b>87.4966</b>

Construction P2 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P2**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	131.59	1000sqft	1.23	131,587.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2031

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Based on information on provided by the College District.  
 Demolition -  
 Trips and VMT - See Construction Phase 2 assumptions file in the AQ/GHG appendix of the DEIR.  
 Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.02	1.23
tblTripsAndVMT	HaulingTripNumber	367.00	368.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

**2.0 Emissions Summary**

Construction P2 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2030	0.0682	0.4532	0.7261	1.7700e-003	0.0962	8.4800e-003	0.1047	0.0256	8.4600e-003	0.0341	0.0000	152.9257	152.9257	5.9600e-003	3.9400e-003	154.2484
2031	0.6860	0.4969	0.8518	1.9400e-003	0.0447	8.8300e-003	0.0535	0.0121	8.8100e-003	0.0209	0.0000	166.2211	166.2211	6.3200e-003	3.3400e-003	167.3730
Maximum	0.6860	0.4969	0.8518	1.9400e-003	0.0962	8.8300e-003	0.1047	0.0256	8.8100e-003	0.0341	0.0000	166.2211	166.2211	6.3200e-003	3.9400e-003	167.3730

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2030	0.0682	0.4531	0.7261	1.7700e-003	0.0591	8.4800e-003	0.0675	0.0159	8.4600e-003	0.0243	0.0000	152.9256	152.9256	5.9600e-003	3.9400e-003	154.2483
2031	0.6860	0.4969	0.8518	1.9400e-003	0.0413	8.8300e-003	0.0502	0.0112	8.8100e-003	0.0200	0.0000	166.2209	166.2209	6.3200e-003	3.3400e-003	167.3729
Maximum	0.6860	0.4969	0.8518	1.9400e-003	0.0591	8.8300e-003	0.0675	0.0159	8.8100e-003	0.0243	0.0000	166.2209	166.2209	6.3200e-003	3.9400e-003	167.3729

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	28.74	0.00	25.59	28.09	0.00	19.24	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2030	10-31-2030	0.3201	0.3201
2	11-1-2030	1-31-2031	0.3049	0.3049



Construction P2 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

3	2-1-2031	4-30-2031	0.2942	0.2942
4	5-1-2031	7-31-2031	0.7830	0.7830
		Highest	0.7830	0.7830

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2030	8/28/2030	5	20	
2	Site Preparation	Site Preparation	8/29/2030	8/30/2030	5	2	
3	Grading	Grading	8/31/2030	9/5/2030	5	4	
4	Building Construction	Building Construction	9/6/2030	6/12/2031	5	200	
5	Paving	Paving	6/13/2031	6/26/2031	5	10	
6	Architectural Coating	Architectural Coating	6/27/2031	7/10/2031	5	10	

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 197,381; Non-Residential Outdoor: 65,794; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	368.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	55.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Fugitive Dust					0.0397	0.0000	0.0397	6.0100e-003	0.0000	6.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.0801	0.1297	2.8000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003	0.0000	24.1504	24.1504	1.0700e-003	0.0000	24.1771
<b>Total</b>	<b>0.0133</b>	<b>0.0801</b>	<b>0.1297</b>	<b>2.8000e-004</b>	<b>0.0397</b>	<b>2.1500e-003</b>	<b>0.0419</b>	<b>6.0100e-003</b>	<b>2.1500e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>24.1504</b>	<b>24.1504</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>24.1771</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	0.0203	6.1300e-003	9.0000e-005	3.1700e-003	2.0000e-004	3.3700e-003	8.7000e-004	1.9000e-004	1.0600e-003	0.0000	8.7515	8.7515	3.5000e-004	1.3900e-003	9.1735
Vendor	4.0000e-005	1.4300e-003	5.5000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6093	0.6093	1.0000e-005	9.0000e-005	0.6364
Worker	2.8000e-004	1.7000e-004	2.8000e-003	1.0000e-005	1.4300e-003	0.0000	1.4300e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.9629	0.9629	2.0000e-005	2.0000e-005	0.9693
<b>Total</b>	<b>7.3000e-004</b>	<b>0.0219</b>	<b>9.4800e-003</b>	<b>1.1000e-004</b>	<b>4.8500e-003</b>	<b>2.1000e-004</b>	<b>5.0600e-003</b>	<b>1.3200e-003</b>	<b>2.0000e-004</b>	<b>1.5200e-003</b>	<b>0.0000</b>	<b>10.3237</b>	<b>10.3237</b>	<b>3.8000e-004</b>	<b>1.5000e-003</b>	<b>10.7792</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0170	0.0000	0.0170	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.0801	0.1297	2.8000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003	0.0000	24.1504	24.1504	1.0700e-003	0.0000	24.1771

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.0133	0.0801	0.1297	2.8000e-004	0.0170	2.1500e-003	0.0191	2.5700e-003	2.1500e-003	4.7200e-003	0.0000	24.1504	24.1504	1.0700e-003	0.0000	24.1771
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	0.0203	6.1300e-003	9.0000e-005	2.9500e-003	2.0000e-004	3.1500e-003	8.2000e-004	1.9000e-004	1.0100e-003	0.0000	8.7515	8.7515	3.5000e-004	1.3900e-003	9.1735
Vendor	4.0000e-005	1.4300e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6093	0.6093	1.0000e-005	9.0000e-005	0.6364
Worker	2.8000e-004	1.7000e-004	2.8000e-003	1.0000e-005	1.3100e-003	0.0000	1.3200e-003	3.5000e-004	0.0000	3.6000e-004	0.0000	0.9629	0.9629	2.0000e-005	2.0000e-005	0.9693
<b>Total</b>	<b>7.3000e-004</b>	<b>0.0219</b>	<b>9.4800e-003</b>	<b>1.1000e-004</b>	<b>4.5000e-003</b>	<b>2.1000e-004</b>	<b>4.7200e-003</b>	<b>1.2400e-003</b>	<b>2.0000e-004</b>	<b>1.4500e-003</b>	<b>0.0000</b>	<b>10.3237</b>	<b>10.3237</b>	<b>3.8000e-004</b>	<b>1.5000e-003</b>	<b>10.7792</b>

3.3 Site Preparation - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-004	4.7400e-003	5.9100e-003	2.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	1.8096	1.8096	8.0000e-005	0.0000	1.8115
<b>Total</b>	<b>9.8000e-004</b>	<b>4.7400e-003</b>	<b>5.9100e-003</b>	<b>2.0000e-005</b>	<b>6.2700e-003</b>	<b>1.6000e-004</b>	<b>6.4300e-003</b>	<b>3.0000e-003</b>	<b>1.6000e-004</b>	<b>3.1600e-003</b>	<b>0.0000</b>	<b>1.8096</b>	<b>1.8096</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.8115</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0609	0.0609	0.0000	1.0000e-005	0.0636
Worker	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0593	0.0593	0.0000	0.0000	0.0597
<b>Total</b>	<b>2.0000e-005</b>	<b>1.5000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1233</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6800e-003	0.0000	2.6800e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-004	4.7400e-003	5.9100e-003	2.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	1.8096	1.8096	8.0000e-005	0.0000	1.8115
<b>Total</b>	<b>9.8000e-004</b>	<b>4.7400e-003</b>	<b>5.9100e-003</b>	<b>2.0000e-005</b>	<b>2.6800e-003</b>	<b>1.6000e-004</b>	<b>2.8400e-003</b>	<b>1.2800e-003</b>	<b>1.6000e-004</b>	<b>1.4400e-003</b>	<b>0.0000</b>	<b>1.8096</b>	<b>1.8096</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.8115</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0609	0.0609	0.0000	1.0000e-005	0.0636
Worker	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0593	0.0593	0.0000	0.0000	0.0597
<b>Total</b>	<b>2.0000e-005</b>	<b>1.5000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1233</b>

3.4 Grading - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0118	0.0159	5.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	4.3332	4.3332	1.9000e-004	0.0000	4.3380
<b>Total</b>	<b>2.3500e-003</b>	<b>0.0118</b>	<b>0.0159</b>	<b>5.0000e-005</b>	<b>0.0142</b>	<b>3.7000e-004</b>	<b>0.0145</b>	<b>6.8500e-003</b>	<b>3.7000e-004</b>	<b>7.2200e-003</b>	<b>0.0000</b>	<b>4.3332</b>	<b>4.3332</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.3380</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.3000e-004	1.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1828	0.1828	0.0000	3.0000e-005	0.1909

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	4.0000e-005	3.0000e-005	4.3000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1481	0.1481	0.0000	0.0000	0.1491
<b>Total</b>	<b>5.0000e-005</b>	<b>4.6000e-004</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.3309</b>	<b>0.3309</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.3401</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0600e-003	0.0000	6.0600e-003	2.9300e-003	0.0000	2.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0118	0.0159	5.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	4.3332	4.3332	1.9000e-004	0.0000	4.3380
<b>Total</b>	<b>2.3500e-003</b>	<b>0.0118</b>	<b>0.0159</b>	<b>5.0000e-005</b>	<b>6.0600e-003</b>	<b>3.7000e-004</b>	<b>6.4300e-003</b>	<b>2.9300e-003</b>	<b>3.7000e-004</b>	<b>3.3000e-003</b>	<b>0.0000</b>	<b>4.3332</b>	<b>4.3332</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.3380</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.3000e-004	1.7000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1828	0.1828	0.0000	3.0000e-005	0.1909
Worker	4.0000e-005	3.0000e-005	4.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1481	0.1481	0.0000	0.0000	0.1491
<b>Total</b>	<b>5.0000e-005</b>	<b>4.6000e-004</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.3309</b>	<b>0.3309</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.3401</b>

Construction P2 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0449	0.2983	0.5026	9.9000e-004		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003	0.0000	81.0436	81.0436	3.6300e-003	0.0000	81.1343
<b>Total</b>	<b>0.0449</b>	<b>0.2983</b>	<b>0.5026</b>	<b>9.9000e-004</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>	<b>0.0000</b>	<b>81.0436</b>	<b>81.0436</b>	<b>3.6300e-003</b>	<b>0.0000</b>	<b>81.1343</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0327	0.0126	1.4000e-004	5.7600e-003	2.3000e-004	5.9900e-003	1.6600e-003	2.2000e-004	1.8800e-003	0.0000	13.9082	13.9082	3.4000e-004	2.0500e-003	14.5266
Worker	4.9900e-003	2.9900e-003	0.0491	1.7000e-004	0.0250	8.0000e-005	0.0251	6.6500e-003	8.0000e-005	6.7200e-003	0.0000	16.9059	16.9059	2.7000e-004	3.5000e-004	17.0184
<b>Total</b>	<b>5.9100e-003</b>	<b>0.0357</b>	<b>0.0617</b>	<b>3.1000e-004</b>	<b>0.0308</b>	<b>3.1000e-004</b>	<b>0.0311</b>	<b>8.3100e-003</b>	<b>3.0000e-004</b>	<b>8.6000e-003</b>	<b>0.0000</b>	<b>30.8141</b>	<b>30.8141</b>	<b>6.1000e-004</b>	<b>2.4000e-003</b>	<b>31.5450</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Off-Road	0.0449	0.2983	0.5026	9.9000e-004		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003	0.0000	81.0435	81.0435	3.6300e-003	0.0000	81.1342
<b>Total</b>	<b>0.0449</b>	<b>0.2983</b>	<b>0.5026</b>	<b>9.9000e-004</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>	<b>0.0000</b>	<b>81.0435</b>	<b>81.0435</b>	<b>3.6300e-003</b>	<b>0.0000</b>	<b>81.1342</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0327	0.0126	1.4000e-004	5.3900e-003	2.3000e-004	5.6200e-003	1.5700e-003	2.2000e-004	1.7900e-003	0.0000	13.9082	13.9082	3.4000e-004	2.0500e-003	14.5266
Worker	4.9900e-003	2.9900e-003	0.0491	1.7000e-004	0.0231	8.0000e-005	0.0232	6.1700e-003	8.0000e-005	6.2400e-003	0.0000	16.9059	16.9059	2.7000e-004	3.5000e-004	17.0184
<b>Total</b>	<b>5.9100e-003</b>	<b>0.0357</b>	<b>0.0617</b>	<b>3.1000e-004</b>	<b>0.0285</b>	<b>3.1000e-004</b>	<b>0.0288</b>	<b>7.7400e-003</b>	<b>3.0000e-004</b>	<b>8.0300e-003</b>	<b>0.0000</b>	<b>30.8141</b>	<b>30.8141</b>	<b>6.1000e-004</b>	<b>2.4000e-003</b>	<b>31.5450</b>

3.5 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0633	0.4205	0.7084	1.3900e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	114.2422	114.2422	5.1100e-003	0.0000	114.3700
<b>Total</b>	<b>0.0633</b>	<b>0.4205</b>	<b>0.7084</b>	<b>1.3900e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>114.2422</b>	<b>114.2422</b>	<b>5.1100e-003</b>	<b>0.0000</b>	<b>114.3700</b>

**Construction P2 - San Bernardino-South Coast County, Annual**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0461	0.0177	2.0000e-004	8.1200e-003	3.2000e-004	8.4300e-003	2.3400e-003	3.0000e-004	2.6500e-003	0.0000	19.2679	19.2679	4.6000e-004	2.8300e-003	20.1238
Worker	6.5800e-003	3.9100e-003	0.0670	2.4000e-004	0.0353	1.1000e-004	0.0354	9.3700e-003	1.0000e-004	9.4700e-003	0.0000	23.5221	23.5221	3.5000e-004	4.8000e-004	23.6749
<b>Total</b>	<b>7.8700e-003</b>	<b>0.0500</b>	<b>0.0846</b>	<b>4.4000e-004</b>	<b>0.0434</b>	<b>4.3000e-004</b>	<b>0.0438</b>	<b>0.0117</b>	<b>4.0000e-004</b>	<b>0.0121</b>	<b>0.0000</b>	<b>42.7899</b>	<b>42.7899</b>	<b>8.1000e-004</b>	<b>3.3100e-003</b>	<b>43.7987</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0633	0.4205	0.7084	1.3900e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	114.2420	114.2420	5.1100e-003	0.0000	114.3699
<b>Total</b>	<b>0.0633</b>	<b>0.4205</b>	<b>0.7084</b>	<b>1.3900e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>114.2420</b>	<b>114.2420</b>	<b>5.1100e-003</b>	<b>0.0000</b>	<b>114.3699</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0461	0.0177	2.0000e-004	7.6000e-003	3.2000e-004	7.9200e-003	2.2200e-003	3.0000e-004	2.5200e-003	0.0000	19.2679	19.2679	4.6000e-004	2.8300e-003	20.1238
Worker	6.5800e-003	3.9100e-003	0.0670	2.4000e-004	0.0325	1.1000e-004	0.0326	8.6900e-003	1.0000e-004	8.8000e-003	0.0000	23.5221	23.5221	3.5000e-004	4.8000e-004	23.6749
<b>Total</b>	<b>7.8700e-003</b>	<b>0.0500</b>	<b>0.0846</b>	<b>4.4000e-004</b>	<b>0.0401</b>	<b>4.3000e-004</b>	<b>0.0406</b>	<b>0.0109</b>	<b>4.0000e-004</b>	<b>0.0113</b>	<b>0.0000</b>	<b>42.7899</b>	<b>42.7899</b>	<b>8.1000e-004</b>	<b>3.3100e-003</b>	<b>43.7987</b>

3.6 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0800e-003	0.0220	0.0473	8.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	7.0351	7.0351	3.3000e-004	0.0000	7.0434
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.0800e-003</b>	<b>0.0220</b>	<b>0.0473</b>	<b>8.0000e-005</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>7.0351</b>	<b>7.0351</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>7.0434</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	1.3000e-004	8.0000e-005	1.3500e-003	0.0000	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4752	0.4752	1.0000e-005	1.0000e-005	0.4783
<b>Total</b>	<b>1.3000e-004</b>	<b>8.0000e-005</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.4752</b>	<b>0.4752</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4783</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0800e-003	0.0220	0.0473	8.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	7.0351	7.0351	3.3000e-004	0.0000	7.0434
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.0800e-003</b>	<b>0.0220</b>	<b>0.0473</b>	<b>8.0000e-005</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>7.0351</b>	<b>7.0351</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>7.0434</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	1.3500e-003	0.0000	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4752	0.4752	1.0000e-005	1.0000e-005	0.4783
<b>Total</b>	<b>1.3000e-004</b>	<b>8.0000e-005</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>6.6000e-004</b>	<b>0.0000</b>	<b>6.6000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>0.4752</b>	<b>0.4752</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4783</b>

Construction P2 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6099					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-004	4.2800e-003	8.9900e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.2766	1.2766	5.0000e-005	0.0000	1.2779
<b>Total</b>	<b>0.6106</b>	<b>4.2800e-003</b>	<b>8.9900e-003</b>	<b>1.0000e-005</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.2779</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	1.1400e-003	0.0000	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4021	0.4021	1.0000e-005	1.0000e-005	0.4047
<b>Total</b>	<b>1.1000e-004</b>	<b>7.0000e-005</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.4021</b>	<b>0.4021</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4047</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
	Archit. Coating	0.6099					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-004	4.2800e-003	8.9900e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.2766	1.2766	5.0000e-005	0.0000	1.2779
<b>Total</b>	<b>0.6106</b>	<b>4.2800e-003</b>	<b>8.9900e-003</b>	<b>1.0000e-005</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.2779</b>

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	1.1400e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4021	0.4021	1.0000e-005	1.0000e-005	0.4047
<b>Total</b>	<b>1.1000e-004</b>	<b>7.0000e-005</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>5.6000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.4021</b>	<b>0.4021</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4047</b>

**Construction P2**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

**Construction P2**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	6.50000E-004	4.28000E-003	8.99000E-003	1.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	1.27663E+000	1.27663E+000	5.00000E-005	0.00000E+000	1.27792E+000
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Concrete/Industrial Saws	2.30000E-003	1.73800E-002	3.62900E-002	6.00000E-005	3.80000E-004	3.80000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.80000E-004	0.00000E+000	5.38106E+000
Cranes	1.98500E-002	6.62800E-002	1.01640E-001	5.30000E-004	2.13000E-003	2.13000E-003	0.00000E+000	4.56844E+001	4.56844E+001	1.61000E-003	0.00000E+000	4.57246E+001
Forklifts	6.66000E-003	3.66100E-002	8.94500E-002	1.40000E-004	4.90000E-004	4.90000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.30000E-004	0.00000E+000	1.21522E+001
Generator Sets	1.95100E-002	1.80340E-001	3.63540E-001	6.60000E-004	3.73000E-003	3.73000E-003	0.00000E+000	5.65208E+001	5.65208E+001	1.59000E-003	0.00000E+000	5.65605E+001
Graders	8.80000E-004	2.77000E-003	4.66000E-003	2.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	2.09143E+000	2.09143E+000	7.00000E-005	0.00000E+000	2.09318E+000
Pavers	1.08000E-003	5.15000E-003	1.20100E-002	2.00000E-005	2.70000E-004	2.70000E-004	0.00000E+000	1.86175E+000	1.86175E+000	9.00000E-005	0.00000E+000	1.86396E+000
Paving Equipment	1.22000E-003	5.71000E-003	1.38500E-002	3.00000E-005	2.90000E-004	2.90000E-004	0.00000E+000	2.16045E+000	2.16045E+000	1.00000E-004	0.00000E+000	2.16292E+000
Rollers	7.00000E-004	4.57000E-003	8.54000E-003	1.00000E-005	1.50000E-004	1.50000E-004	0.00000E+000	1.20934E+000	1.20934E+000	6.00000E-005	0.00000E+000	1.21078E+000
Rubber Tired Dozers	7.52000E-003	4.10100E-002	2.96600E-002	1.30000E-004	1.55000E-003	1.55000E-003	0.00000E+000	1.15665E+001	1.15665E+001	6.10000E-004	0.00000E+000	1.15817E+001
Tractors/Loaders/Bulldozers	1.97100E-002	1.17700E-001	2.68530E-001	4.30000E-004	2.17000E-003	2.17000E-003	0.00000E+000	3.73659E+001	3.73659E+001	1.58000E-003	0.00000E+000	3.74054E+001
Welders	4.91800E-002	3.58480E-001	4.80490E-001	7.70000E-004	4.93000E-003	4.93000E-003	0.00000E+000	5.64662E+001	5.64662E+001	3.97000E-003	0.00000E+000	5.65656E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	6.50000E-004	4.28000E-003	8.99000E-003	1.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	1.27663E+000	1.27663E+000	5.00000E-005	0.00000E+000	1.27792E+000
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Concrete/Industrial Saws	2.30000E-003	1.73800E-002	3.62900E-002	6.00000E-005	3.80000E-004	3.80000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.80000E-004	0.00000E+000	5.38105E+000
Cranes	1.98500E-002	6.62800E-002	1.01640E-001	5.30000E-004	2.13000E-003	2.13000E-003	0.00000E+000	4.56844E+001	4.56844E+001	1.61000E-003	0.00000E+000	4.57246E+001
Forklifts	6.66000E-003	3.66100E-002	8.94500E-002	1.40000E-004	4.90000E-004	4.90000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.30000E-004	0.00000E+000	1.21522E+001
Generator Sets	1.95100E-002	1.80340E-001	3.63540E-001	6.60000E-004	3.73000E-003	3.73000E-003	0.00000E+000	5.65207E+001	5.65207E+001	1.59000E-003	0.00000E+000	5.65605E+001
Graders	8.80000E-004	2.77000E-003	4.66000E-003	2.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	2.09143E+000	2.09143E+000	7.00000E-005	0.00000E+000	2.09318E+000
Pavers	1.08000E-003	5.15000E-003	1.20100E-002	2.00000E-005	2.70000E-004	2.70000E-004	0.00000E+000	1.86175E+000	1.86175E+000	9.00000E-005	0.00000E+000	1.86396E+000
Paving Equipment	1.22000E-003	5.71000E-003	1.38500E-002	3.00000E-005	2.90000E-004	2.90000E-004	0.00000E+000	2.16044E+000	2.16044E+000	1.00000E-004	0.00000E+000	2.16291E+000
Rollers	7.00000E-004	4.57000E-003	8.54000E-003	1.00000E-005	1.50000E-004	1.50000E-004	0.00000E+000	1.20934E+000	1.20934E+000	6.00000E-005	0.00000E+000	1.21078E+000
Rubber Tired Dozers	7.52000E-003	4.10100E-002	2.96600E-002	1.30000E-004	1.55000E-003	1.55000E-003	0.00000E+000	1.15665E+001	1.15665E+001	6.10000E-004	0.00000E+000	1.15817E+001



**Construction P2**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Tractors/Loaders/Bac hoes	1.97100E-002	1.17700E-001	2.68530E-001	4.30000E-004	2.17000E-003	2.17000E-003	0.00000E+000	3.73659E+001	3.73659E+001	1.58000E-003	0.00000E+000	3.74053E+001
Welders	4.91800E-002	3.58480E-001	4.80490E-001	7.70000E-004	4.93000E-003	4.93000E-003	0.00000E+000	5.64661E+001	5.64661E+001	3.97000E-003	0.00000E+000	5.65655E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85837E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.09447E-006	1.09447E-006	0.00000E+000	0.00000E+000	1.09350E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64760E-006	1.64760E-006	0.00000E+000	0.00000E+000	1.64579E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23848E-006	1.23848E-006	0.00000E+000	0.00000E+000	1.23761E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.62867E-006	4.62867E-006	0.00000E+000	0.00000E+000	4.62338E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.72913E-006	1.72913E-006	0.00000E+000	0.00000E+000	8.63428E-007
Tractors/Loaders/Bac hoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07049E-006	1.07049E-006	0.00000E+000	0.00000E+000	1.06936E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23968E-006	1.23968E-006	0.00000E+000	0.00000E+000	1.23750E-006

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00
Yes	Clean Paved Road	% PM Reduction	9.00		
				Frequency (per day)	2.00

### Construction P2

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.07	0.06
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.07	0.02	0.07	0.02	0.08	0.07
Demolition	Fugitive Dust	0.04	0.01	0.02	0.00	0.57	0.57
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.06
Grading	Fugitive Dust	0.01	0.01	0.01	0.00	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.10	0.13
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.07	0.05
Site Preparation	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.17	0.00

# CalEEMod Output: Phase 2 Construction – Mitigated

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Construction P2 - Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P2 - Mitigated**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	131.59	1000sqft	1.23	131,587.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2031

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information on provided by the College District.
- Trips and VMT - See Construction Phase 2 assumptions file in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.02	1.23
tblTripsAndVMT	HaulingTripNumber	367.00	368.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

Construction P2 - Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4088	10.0754	13.9536	0.0387	7.2328	0.2363	7.4206	3.4655	0.2353	3.6532	0.0000	3,808.0554	3,808.0554	0.1599	0.1647	3,861.1320
2031	24.5522	7.9988	13.7272	0.0316	0.7557	0.1733	0.8900	0.2036	0.1732	0.3376	0.0000	2,994.6746	2,994.6746	0.1115	0.0619	3,015.9020
<b>Maximum</b>	<b>24.5522</b>	<b>10.0754</b>	<b>13.9536</b>	<b>0.0387</b>	<b>7.2328</b>	<b>0.2363</b>	<b>7.4206</b>	<b>3.4655</b>	<b>0.2353</b>	<b>3.6532</b>	<b>0.0000</b>	<b>3,808.0554</b>	<b>3,808.0554</b>	<b>0.1599</b>	<b>0.1647</b>	<b>3,861.1320</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4088	10.0754	13.9536	0.0387	3.1668	0.2363	3.3546	1.5020	0.2353	1.6897	0.0000	3,808.0554	3,808.0554	0.1599	0.1647	3,861.1320
2031	24.5522	7.9988	13.7272	0.0316	0.6986	0.1733	0.8329	0.1896	0.1732	0.3236	0.0000	2,994.6746	2,994.6746	0.1115	0.0619	3,015.9020
<b>Maximum</b>	<b>24.5522</b>	<b>10.0754</b>	<b>13.9536</b>	<b>0.0387</b>	<b>3.1668</b>	<b>0.2363</b>	<b>3.3546</b>	<b>1.5020</b>	<b>0.2353</b>	<b>1.6897</b>	<b>0.0000</b>	<b>3,808.0554</b>	<b>3,808.0554</b>	<b>0.1599</b>	<b>0.1647</b>	<b>3,861.1320</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>51.61</b>	<b>0.00</b>	<b>49.61</b>	<b>53.89</b>	<b>0.00</b>	<b>49.55</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2030	8/28/2030	5	20	
2	Site Preparation	Site Preparation	8/29/2030	8/30/2030	5	2	
3	Grading	Grading	8/31/2030	9/5/2030	5	4	
4	Building Construction	Building Construction	9/6/2030	6/12/2031	5	200	
5	Paving	Paving	6/13/2031	6/26/2031	5	10	
6	Architectural Coating	Architectural Coating	6/27/2031	7/10/2031	5	10	

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 197,381; Non-Residential Outdoor: 65,794; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	368.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	55.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2030**

**Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					3.9706	0.0000	3.9706	0.6012	0.0000	0.6012			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148		2,662.1297	2,662.1297	0.1177		2,665.0713



Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	1.3307	8.0078	12.9685	0.0281	3.9706	0.2148	4.1853	0.6012	0.2148	0.8159		2,662.1297	2,662.1297	0.1177		2,665.0713
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0421	1.9157	0.6083	8.8600e-003	0.3222	0.0200	0.3422	0.0883	0.0192	0.1075		964.0417	964.0417	0.0389	0.1527	1,010.5290
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.6000e-004	8.3400e-003		67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783
Worker	0.0317	0.0155	0.3226	1.0600e-003	0.1453	4.8000e-004	0.1458	0.0385	4.4000e-004	0.0390		114.7878	114.7878	1.6400e-003	2.1000e-003	115.4534
Total	0.0780	2.0677	0.9851	0.0106	0.4931	0.0215	0.5146	0.1343	0.0206	0.1548		1,145.9257	1,145.9257	0.0422	0.1647	1,196.0607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6974	0.0000	1.6974	0.2570	0.0000	0.2570			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148	0.0000	2,662.1297	2,662.1297	0.1177		2,665.0713
Total	1.3307	8.0078	12.9685	0.0281	1.6974	0.2148	1.9122	0.2570	0.2148	0.4718	0.0000	2,662.1297	2,662.1297	0.1177		2,665.0713

Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0421	1.9157	0.6083	8.8600e-003	0.3003	0.0200	0.3203	0.0830	0.0192	0.1021		964.0417	964.0417	0.0389	0.1527	1,010.5290
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.6000e-004	7.9400e-003		67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783
Worker	0.0317	0.0155	0.3226	1.0600e-003	0.1339	4.8000e-004	0.1344	0.0358	4.4000e-004	0.0362		114.7878	114.7878	1.6400e-003	2.1000e-003	115.4534
<b>Total</b>	<b>0.0780</b>	<b>2.0677</b>	<b>0.9851</b>	<b>0.0106</b>	<b>0.4582</b>	<b>0.0215</b>	<b>0.4797</b>	<b>0.1257</b>	<b>0.0206</b>	<b>0.1463</b>		<b>1,145.9257</b>	<b>1,145.9257</b>	<b>0.0422</b>	<b>0.1647</b>	<b>1,196.0607</b>

**3.3 Site Preparation - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567		1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>6.2662</b>	<b>0.1567</b>	<b>6.4229</b>	<b>3.0041</b>	<b>0.1567</b>	<b>3.1607</b>		<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.6000e-004	8.3400e-003	67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783	
Worker	0.0195	9.5400e-003	0.1985	6.5000e-004	0.0894	2.9000e-004	0.0897	0.0237	2.7000e-004	0.0240	70.6387	70.6387	1.0100e-003	1.2900e-003	71.0482	
<b>Total</b>	<b>0.0237</b>	<b>0.1460</b>	<b>0.2528</b>	<b>1.2800e-003</b>	<b>0.1151</b>	<b>1.3000e-003</b>	<b>0.1163</b>	<b>0.0311</b>	<b>1.2300e-003</b>	<b>0.0323</b>	<b>137.7349</b>	<b>137.7349</b>	<b>2.6400e-003</b>	<b>0.0112</b>	<b>141.1265</b>	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6788	0.0000	2.6788	1.2843	0.0000	1.2843			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567	0.0000	1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>2.6788</b>	<b>0.1567</b>	<b>2.8355</b>	<b>1.2843</b>	<b>0.1567</b>	<b>1.4409</b>	<b>0.0000</b>	<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-003	0.1364	0.0543	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.6000e-004	7.9400e-003	67.0962	67.0962	1.6300e-003	9.8700e-003	70.0783	

Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0195	9.5400e-003	0.1985	6.5000e-004	0.0824	2.9000e-004	0.0827	0.0220	2.7000e-004	0.0223		70.6387	70.6387	1.0100e-003	1.2900e-003	71.0482
<b>Total</b>	<b>0.0237</b>	<b>0.1460</b>	<b>0.2528</b>	<b>1.2800e-003</b>	<b>0.1064</b>	<b>1.3000e-003</b>	<b>0.1077</b>	<b>0.0290</b>	<b>1.2300e-003</b>	<b>0.0302</b>		<b>137.7349</b>	<b>137.7349</b>	<b>2.6400e-003</b>	<b>0.0112</b>	<b>141.1265</b>

**3.4 Grading - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859		2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>7.0826</b>	<b>0.1859</b>	<b>7.2685</b>	<b>3.4247</b>	<b>0.1859</b>	<b>3.6107</b>		<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3000e-003	0.2046	0.0814	9.4000e-004	0.0384	1.5100e-003	0.0400	0.0111	1.4500e-003	0.0125		100.6444	100.6444	2.4400e-003	0.0148	105.1174
Worker	0.0244	0.0119	0.2481	8.2000e-004	0.1118	3.7000e-004	0.1121	0.0296	3.4000e-004	0.0300		88.2983	88.2983	1.2600e-003	1.6100e-003	88.8103
<b>Total</b>	<b>0.0307</b>	<b>0.2166</b>	<b>0.3295</b>	<b>1.7600e-003</b>	<b>0.1502</b>	<b>1.8800e-003</b>	<b>0.1521</b>	<b>0.0407</b>	<b>1.7900e-003</b>	<b>0.0425</b>		<b>188.9427</b>	<b>188.9427</b>	<b>3.7000e-003</b>	<b>0.0164</b>	<b>193.9277</b>

**Construction P2 - Mitigated - San Bernardino-South Coast County, Summer**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859	0.0000	2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>3.0278</b>	<b>0.1859</b>	<b>3.2137</b>	<b>1.4641</b>	<b>0.1859</b>	<b>1.6500</b>	<b>0.0000</b>	<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3000e-003	0.2046	0.0814	9.4000e-004	0.0360	1.5100e-003	0.0375	0.0105	1.4500e-003	0.0119		100.6444	100.6444	2.4400e-003	0.0148	105.1174
Worker	0.0244	0.0119	0.2481	8.2000e-004	0.1030	3.7000e-004	0.1034	0.0275	3.4000e-004	0.0278		88.2983	88.2983	1.2600e-003	1.6100e-003	88.8103
<b>Total</b>	<b>0.0307</b>	<b>0.2166</b>	<b>0.3295</b>	<b>1.7600e-003</b>	<b>0.1390</b>	<b>1.8800e-003</b>	<b>0.1409</b>	<b>0.0380</b>	<b>1.7900e-003</b>	<b>0.0397</b>		<b>188.9427</b>	<b>188.9427</b>	<b>3.7000e-003</b>	<b>0.0164</b>	<b>193.9277</b>

**3.5 Building Construction - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270		2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>		<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.7503	0.2985	3.4400e-003	0.1409	5.5400e-003	0.1465	0.0406	5.3000e-003	0.0459		369.0293	369.0293	8.9500e-003	0.0543	385.4306
Worker	0.1341	0.0656	1.3647	4.4900e-003	0.6148	2.0200e-003	0.6168	0.1630	1.8600e-003	0.1649		485.6408	485.6408	6.9300e-003	8.8700e-003	488.4565
<b>Total</b>	<b>0.1572</b>	<b>0.8159</b>	<b>1.6632</b>	<b>7.9300e-003</b>	<b>0.7557</b>	<b>7.5600e-003</b>	<b>0.7633</b>	<b>0.2036</b>	<b>7.1600e-003</b>	<b>0.2108</b>		<b>854.6701</b>	<b>854.6701</b>	<b>0.0159</b>	<b>0.0632</b>	<b>873.8872</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

**Construction P2 - Mitigated - San Bernardino-South Coast County, Summer**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.7503	0.2985	3.4400e-003	0.1319	5.5400e-003	0.1375	0.0384	5.3000e-003	0.0437		369.0293	369.0293	8.9500e-003	0.0543	385.4308
Worker	0.1341	0.0656	1.3647	4.4900e-003	0.5667	2.0200e-003	0.5687	0.1512	1.8600e-003	0.1531		485.6408	485.6408	6.9300e-003	8.8700e-003	488.4565
<b>Total</b>	<b>0.1572</b>	<b>0.8159</b>	<b>1.6632</b>	<b>7.9300e-003</b>	<b>0.6986</b>	<b>7.5600e-003</b>	<b>0.7061</b>	<b>0.1896</b>	<b>7.1600e-003</b>	<b>0.1968</b>		<b>854.6701</b>	<b>854.6701</b>	<b>0.0159</b>	<b>0.0632</b>	<b>873.8872</b>

**3.5 Building Construction - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270		2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>		<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0230	0.7497	0.2977	3.3900e-003	0.1409	5.4200e-003	0.1464	0.0406	5.1800e-003	0.0458	362.6721	362.6721	8.7300e-003	0.0533	378.7757	
Worker	0.1253	0.0610	1.3195	4.4100e-003	0.6148	1.9000e-003	0.6167	0.1630	1.7500e-003	0.1648	479.3459	479.3459	6.4200e-003	8.5700e-003	482.0608	
<b>Total</b>	<b>0.1483</b>	<b>0.8107</b>	<b>1.6172</b>	<b>7.8000e-003</b>	<b>0.7557</b>	<b>7.3200e-003</b>	<b>0.7630</b>	<b>0.2036</b>	<b>6.9300e-003</b>	<b>0.2106</b>	<b>842.0180</b>	<b>842.0180</b>	<b>0.0152</b>	<b>0.0619</b>	<b>860.8365</b>	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.7497	0.2977	3.3900e-003	0.1319	5.4200e-003	0.1373	0.0384	5.1800e-003	0.0436		362.6721	362.6721	8.7300e-003	0.0533	378.7757
Worker	0.1253	0.0610	1.3195	4.4100e-003	0.5667	1.9000e-003	0.5686	0.1512	1.7500e-003	0.1530		479.3459	479.3459	6.4200e-003	8.5700e-003	482.0608



Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1483	0.8107	1.6172	7.8000e-003	0.6986	7.3200e-003	0.7059	0.1896	6.9300e-003	0.1965		842.0180	842.0180	0.0152	0.0619	860.8365
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3.6 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728		1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>		<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0144	0.3119	1.0400e-003	0.1453	4.5000e-004	0.1458	0.0385	4.1000e-004	0.0390		113.2999	113.2999	1.5200e-003	2.0300e-003	113.9416
<b>Total</b>	<b>0.0296</b>	<b>0.0144</b>	<b>0.3119</b>	<b>1.0400e-003</b>	<b>0.1453</b>	<b>4.5000e-004</b>	<b>0.1458</b>	<b>0.0385</b>	<b>4.1000e-004</b>	<b>0.0390</b>		<b>113.2999</b>	<b>113.2999</b>	<b>1.5200e-003</b>	<b>2.0300e-003</b>	<b>113.9416</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728	0.0000	1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>	<b>0.0000</b>	<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0144	0.3119	1.0400e-003	0.1339	4.5000e-004	0.1344	0.0358	4.1000e-004	0.0362		113.2999	113.2999	1.5200e-003	2.0300e-003	113.9416
<b>Total</b>	<b>0.0296</b>	<b>0.0144</b>	<b>0.3119</b>	<b>1.0400e-003</b>	<b>0.1339</b>	<b>4.5000e-004</b>	<b>0.1344</b>	<b>0.0358</b>	<b>4.1000e-004</b>	<b>0.0362</b>		<b>113.2999</b>	<b>113.2999</b>	<b>1.5200e-003</b>	<b>2.0300e-003</b>	<b>113.9416</b>

**3.7 Architectural Coating - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	24.3964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
<b>Total</b>	<b>24.5271</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.9700e-003</b>		<b>0.0203</b>	<b>0.0203</b>		<b>0.0203</b>	<b>0.0203</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0114</b>		<b>281.7328</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0122	0.2639	8.8000e-004	0.1230	3.8000e-004	0.1233	0.0326	3.5000e-004	0.0330		95.8692	95.8692	1.2800e-003	1.7100e-003	96.4122
<b>Total</b>	<b>0.0251</b>	<b>0.0122</b>	<b>0.2639</b>	<b>8.8000e-004</b>	<b>0.1230</b>	<b>3.8000e-004</b>	<b>0.1233</b>	<b>0.0326</b>	<b>3.5000e-004</b>	<b>0.0330</b>		<b>95.8692</b>	<b>95.8692</b>	<b>1.2800e-003</b>	<b>1.7100e-003</b>	<b>96.4122</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.3964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

Construction P2 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	24.5271	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0122	0.2639	8.8000e-004	0.1133	3.8000e-004	0.1137	0.0303	3.5000e-004	0.0306		95.8692	95.8692	1.2800e-003	1.7100e-003	96.4122
<b>Total</b>	<b>0.0251</b>	<b>0.0122</b>	<b>0.2639</b>	<b>8.8000e-004</b>	<b>0.1133</b>	<b>3.8000e-004</b>	<b>0.1137</b>	<b>0.0303</b>	<b>3.5000e-004</b>	<b>0.0306</b>		<b>95.8692</b>	<b>95.8692</b>	<b>1.2800e-003</b>	<b>1.7100e-003</b>	<b>96.4122</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P2 - Mitigated**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	131.59	1000sqft	1.23	131,587.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2031

**Utility Company**

<b>CO2 Intensity (lb/MWahr)</b>	0	<b>CH4 Intensity (lb/MWahr)</b>	0	<b>N2O Intensity (lb/MWahr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information on provided by the College District.
- Trips and VMT - See Construction Phase 2 assumptions file in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.02	1.23
tblTripsAndVMT	HaulingTripNumber	367.00	368.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4044	10.1886	13.9106	0.0386	7.2328	0.2363	7.4206	3.4655	0.2353	3.6532	0.0000	3,799.0642	3,799.0642	0.1597	0.1650	3,852.2373
2031	24.5517	8.0442	13.5090	0.0312	0.7557	0.1733	0.8901	0.2036	0.1732	0.3376	0.0000	2,950.9452	2,950.9452	0.1115	0.0623	2,972.2994
<b>Maximum</b>	<b>24.5517</b>	<b>10.1886</b>	<b>13.9106</b>	<b>0.0386</b>	<b>7.2328</b>	<b>0.2363</b>	<b>7.4206</b>	<b>3.4655</b>	<b>0.2353</b>	<b>3.6532</b>	<b>0.0000</b>	<b>3,799.0642</b>	<b>3,799.0642</b>	<b>0.1597</b>	<b>0.1650</b>	<b>3,852.2373</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	1.4044	10.1886	13.9106	0.0386	3.1668	0.2363	3.3546	1.5020	0.2353	1.6897	0.0000	3,799.0642	3,799.0642	0.1597	0.1650	3,852.2373
2031	24.5517	8.0442	13.5090	0.0312	0.6986	0.1733	0.8329	0.1896	0.1732	0.3236	0.0000	2,950.9452	2,950.9452	0.1115	0.0623	2,972.2994
<b>Maximum</b>	<b>24.5517</b>	<b>10.1886</b>	<b>13.9106</b>	<b>0.0386</b>	<b>3.1668</b>	<b>0.2363</b>	<b>3.3546</b>	<b>1.5020</b>	<b>0.2353</b>	<b>1.6897</b>	<b>0.0000</b>	<b>3,799.0642</b>	<b>3,799.0642</b>	<b>0.1597</b>	<b>0.1650</b>	<b>3,852.2373</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>51.61</b>	<b>0.00</b>	<b>49.61</b>	<b>53.89</b>	<b>0.00</b>	<b>49.55</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2030	8/28/2030	5	20	
2	Site Preparation	Site Preparation	8/29/2030	8/30/2030	5	2	
3	Grading	Grading	8/31/2030	9/5/2030	5	4	
4	Building Construction	Building Construction	9/6/2030	6/12/2031	5	200	
5	Paving	Paving	6/13/2031	6/26/2031	5	10	
6	Architectural Coating	Architectural Coating	6/27/2031	7/10/2031	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 197,381; Non-Residential Outdoor: 65,794; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	368.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	55.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2030**

**Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					3.9706	0.0000	3.9706	0.6012	0.0000	0.6012			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148		2,662.1297	2,662.1297	0.1177		2,665.0713



Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	1.3307	8.0078	12.9685	0.0281	3.9706	0.2148	4.1853	0.6012	0.2148	0.8159		2,662.1297	2,662.1297	0.1177		2,665.0713
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0388	2.0205	0.6191	8.8700e-003	0.3222	0.0201	0.3422	0.0883	0.0192	0.1075		965.5717	965.5717	0.0388	0.1530	1,012.1272
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.7000e-004	8.3500e-003		67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579
Worker	0.0310	0.0163	0.2670	9.6000e-004	0.1453	4.8000e-004	0.1458	0.0385	4.4000e-004	0.0390		104.0957	104.0957	1.6700e-003	2.1600e-003	104.7809
<b>Total</b>	<b>0.0737</b>	<b>2.1809</b>	<b>0.9420</b>	<b>0.0105</b>	<b>0.4931</b>	<b>0.0215</b>	<b>0.5147</b>	<b>0.1343</b>	<b>0.0206</b>	<b>0.1549</b>		<b>1,136.9345</b>	<b>1,136.9345</b>	<b>0.0420</b>	<b>0.1650</b>	<b>1,187.1660</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6974	0.0000	1.6974	0.2570	0.0000	0.2570			0.0000			0.0000
Off-Road	1.3307	8.0078	12.9685	0.0281		0.2148	0.2148		0.2148	0.2148	0.0000	2,662.1297	2,662.1297	0.1177		2,665.0713
<b>Total</b>	<b>1.3307</b>	<b>8.0078</b>	<b>12.9685</b>	<b>0.0281</b>	<b>1.6974</b>	<b>0.2148</b>	<b>1.9122</b>	<b>0.2570</b>	<b>0.2148</b>	<b>0.4718</b>	<b>0.0000</b>	<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.1177</b>		<b>2,665.0713</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0388	2.0205	0.6191	8.8700e-003	0.3003	0.0201	0.3203	0.0830	0.0192	0.1022		965.5717	965.5717	0.0388	0.1530	1,012.1272
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.7000e-004	7.9400e-003		67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579
Worker	0.0310	0.0163	0.2670	9.6000e-004	0.1339	4.8000e-004	0.1344	0.0358	4.4000e-004	0.0362		104.0957	104.0957	1.6700e-003	2.1600e-003	104.7809
<b>Total</b>	<b>0.0737</b>	<b>2.1809</b>	<b>0.9420</b>	<b>0.0105</b>	<b>0.4582</b>	<b>0.0215</b>	<b>0.4797</b>	<b>0.1257</b>	<b>0.0206</b>	<b>0.1463</b>		<b>1,136.9345</b>	<b>1,136.9345</b>	<b>0.0420</b>	<b>0.1650</b>	<b>1,187.1660</b>

**3.3 Site Preparation - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567		1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>6.2662</b>	<b>0.1567</b>	<b>6.4229</b>	<b>3.0041</b>	<b>0.1567</b>	<b>3.1607</b>		<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0256	1.0100e-003	0.0266	7.3800e-003	9.7000e-004	8.3500e-003	67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579	
Worker	0.0191	0.0100	0.1643	5.9000e-004	0.0894	2.9000e-004	0.0897	0.0237	2.7000e-004	0.0240	64.0589	64.0589	1.0300e-003	1.3300e-003	64.4805	
<b>Total</b>	<b>0.0229</b>	<b>0.1542</b>	<b>0.2203</b>	<b>1.2200e-003</b>	<b>0.1151</b>	<b>1.3000e-003</b>	<b>0.1164</b>	<b>0.0311</b>	<b>1.2400e-003</b>	<b>0.0323</b>	<b>131.3260</b>	<b>131.3260</b>	<b>2.6400e-003</b>	<b>0.0112</b>	<b>134.7384</b>	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6788	0.0000	2.6788	1.2843	0.0000	1.2843			0.0000			0.0000
Off-Road	0.9750	4.7401	5.9133	0.0211		0.1567	0.1567		0.1567	0.1567	0.0000	1,994.6929	1,994.6929	0.0866		1,996.8585
<b>Total</b>	<b>0.9750</b>	<b>4.7401</b>	<b>5.9133</b>	<b>0.0211</b>	<b>2.6788</b>	<b>0.1567</b>	<b>2.8355</b>	<b>1.2843</b>	<b>0.1567</b>	<b>1.4409</b>	<b>0.0000</b>	<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0866</b>		<b>1,996.8585</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8700e-003	0.1442	0.0560	6.3000e-004	0.0240	1.0100e-003	0.0250	6.9800e-003	9.7000e-004	7.9400e-003	67.2671	67.2671	1.6100e-003	9.9000e-003	70.2579	

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0191	0.0100	0.1643	5.9000e-004	0.0824	2.9000e-004	0.0827	0.0220	2.7000e-004	0.0223		64.0589	64.0589	1.0300e-003	1.3300e-003	64.4805
<b>Total</b>	<b>0.0229</b>	<b>0.1542</b>	<b>0.2203</b>	<b>1.2200e-003</b>	<b>0.1064</b>	<b>1.3000e-003</b>	<b>0.1077</b>	<b>0.0290</b>	<b>1.2400e-003</b>	<b>0.0302</b>		<b>131.3260</b>	<b>131.3260</b>	<b>2.6400e-003</b>	<b>0.0112</b>	<b>134.7384</b>

**3.4 Grading - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859		2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>7.0826</b>	<b>0.1859</b>	<b>7.2685</b>	<b>3.4247</b>	<b>0.1859</b>	<b>3.6107</b>		<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8000e-003	0.2162	0.0840	9.4000e-004	0.0384	1.5200e-003	0.0400	0.0111	1.4500e-003	0.0125		100.9007	100.9007	2.4200e-003	0.0149	105.3868
Worker	0.0238	0.0125	0.2054	7.4000e-004	0.1118	3.7000e-004	0.1121	0.0296	3.4000e-004	0.0300		80.0736	80.0736	1.2800e-003	1.6600e-003	80.6007
<b>Total</b>	<b>0.0296</b>	<b>0.2287</b>	<b>0.2894</b>	<b>1.6800e-003</b>	<b>0.1502</b>	<b>1.8900e-003</b>	<b>0.1521</b>	<b>0.0407</b>	<b>1.7900e-003</b>	<b>0.0425</b>		<b>180.9742</b>	<b>180.9742</b>	<b>3.7000e-003</b>	<b>0.0165</b>	<b>185.9875</b>

**Construction P2 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	1.1771	5.9092	7.9601	0.0252		0.1859	0.1859		0.1859	0.1859	0.0000	2,388.2741	2,388.2741	0.1046		2,390.8880
<b>Total</b>	<b>1.1771</b>	<b>5.9092</b>	<b>7.9601</b>	<b>0.0252</b>	<b>3.0278</b>	<b>0.1859</b>	<b>3.2137</b>	<b>1.4641</b>	<b>0.1859</b>	<b>1.6500</b>	<b>0.0000</b>	<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.1046</b>		<b>2,390.8880</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8000e-003	0.2162	0.0840	9.4000e-004	0.0360	1.5200e-003	0.0375	0.0105	1.4500e-003	0.0119		100.9007	100.9007	2.4200e-003	0.0149	105.3868
Worker	0.0238	0.0125	0.2054	7.4000e-004	0.1030	3.7000e-004	0.1034	0.0275	3.4000e-004	0.0278		80.0736	80.0736	1.2800e-003	1.6600e-003	80.6007
<b>Total</b>	<b>0.0296</b>	<b>0.2287</b>	<b>0.2894</b>	<b>1.6800e-003</b>	<b>0.1390</b>	<b>1.8900e-003</b>	<b>0.1409</b>	<b>0.0380</b>	<b>1.7900e-003</b>	<b>0.0397</b>		<b>180.9742</b>	<b>180.9742</b>	<b>3.7000e-003</b>	<b>0.0165</b>	<b>185.9875</b>

**3.5 Building Construction - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270		2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>		<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0213	0.7928	0.3080	3.4500e-003	0.1409	5.5600e-003	0.1465	0.0406	5.3200e-003	0.0459		369.9691	369.9691	8.8600e-003	0.0545	386.4182
Worker	0.1311	0.0688	1.1295	4.0700e-003	0.6148	2.0200e-003	0.6168	0.1630	1.8600e-003	0.1649		440.4048	440.4048	7.0500e-003	9.1400e-003	443.3037
<b>Total</b>	<b>0.1523</b>	<b>0.8616</b>	<b>1.4374</b>	<b>7.5200e-003</b>	<b>0.7557</b>	<b>7.5800e-003</b>	<b>0.7633</b>	<b>0.2036</b>	<b>7.1800e-003</b>	<b>0.2108</b>		<b>810.3738</b>	<b>810.3738</b>	<b>0.0159</b>	<b>0.0636</b>	<b>829.7219</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0213	0.7928	0.3080	3.4500e-003	0.1319	5.5600e-003	0.1375	0.0384	5.3200e-003	0.0437		369.9691	369.9691	8.8600e-003	0.0545	386.4182
Worker	0.1311	0.0688	1.1295	4.0700e-003	0.5667	2.0200e-003	0.5687	0.1512	1.8600e-003	0.1531		440.4048	440.4048	7.0500e-003	9.1400e-003	443.3037
<b>Total</b>	<b>0.1523</b>	<b>0.8616</b>	<b>1.4374</b>	<b>7.5200e-003</b>	<b>0.6986</b>	<b>7.5800e-003</b>	<b>0.7062</b>	<b>0.1896</b>	<b>7.1800e-003</b>	<b>0.1968</b>		<b>810.3738</b>	<b>810.3738</b>	<b>0.0159</b>	<b>0.0636</b>	<b>829.7219</b>

**3.5 Building Construction - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270		2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>		<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0211	0.7922	0.3071	3.4000e-003	0.1409	5.4300e-003	0.1464	0.0406	5.2000e-003	0.0458	363.6002	363.6002	8.6400e-003	0.0535	379.7510	
Worker	0.1227	0.0639	1.0919	3.9900e-003	0.6148	1.9000e-003	0.6167	0.1630	1.7500e-003	0.1648	434.6884	434.6884	6.5400e-003	8.8300e-003	437.4830	
<b>Total</b>	<b>0.1438</b>	<b>0.8561</b>	<b>1.3990</b>	<b>7.3900e-003</b>	<b>0.7557</b>	<b>7.3300e-003</b>	<b>0.7630</b>	<b>0.2036</b>	<b>6.9500e-003</b>	<b>0.2106</b>	<b>798.2886</b>	<b>798.2886</b>	<b>0.0152</b>	<b>0.0623</b>	<b>817.2340</b>	

**Mitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0812	7.1882	12.1101	0.0238		0.1270	0.1270		0.1270	0.1270	0.0000	2,152.6566	2,152.6566	0.0964		2,155.0655
<b>Total</b>	<b>1.0812</b>	<b>7.1882</b>	<b>12.1101</b>	<b>0.0238</b>		<b>0.1270</b>	<b>0.1270</b>		<b>0.1270</b>	<b>0.1270</b>	<b>0.0000</b>	<b>2,152.6566</b>	<b>2,152.6566</b>	<b>0.0964</b>		<b>2,155.0655</b>

**Mitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0211	0.7922	0.3071	3.4000e-003	0.1319	5.4300e-003	0.1373	0.0384	5.2000e-003	0.0436	363.6002	363.6002	8.6400e-003	0.0535	379.7510	
Worker	0.1227	0.0639	1.0919	3.9900e-003	0.5667	1.9000e-003	0.5686	0.1512	1.7500e-003	0.1530	434.6884	434.6884	6.5400e-003	8.8300e-003	437.4830	



Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1438	0.8561	1.3990	7.3900e-003	0.6986	7.3300e-003	0.7059	0.1896	6.9500e-003	0.1965		798.2886	798.2886	0.0152	0.0623	817.2340
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3.6 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728		1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>		<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0151	0.2581	9.4000e-004	0.1453	4.5000e-004	0.1458	0.0385	4.1000e-004	0.0390		102.7445	102.7445	1.5500e-003	2.0900e-003	103.4051
<b>Total</b>	<b>0.0290</b>	<b>0.0151</b>	<b>0.2581</b>	<b>9.4000e-004</b>	<b>0.1453</b>	<b>4.5000e-004</b>	<b>0.1458</b>	<b>0.0385</b>	<b>4.1000e-004</b>	<b>0.0390</b>		<b>102.7445</b>	<b>102.7445</b>	<b>1.5500e-003</b>	<b>2.0900e-003</b>	<b>103.4051</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8162	4.3905	9.4567	0.0165		0.1728	0.1728		0.1728	0.1728	0.0000	1,550.9712	1,550.9712	0.0731		1,552.7983
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8162</b>	<b>4.3905</b>	<b>9.4567</b>	<b>0.0165</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1728</b>	<b>0.1728</b>	<b>0.0000</b>	<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0731</b>		<b>1,552.7983</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0151	0.2581	9.4000e-004	0.1339	4.5000e-004	0.1344	0.0358	4.1000e-004	0.0362		102.7445	102.7445	1.5500e-003	2.0900e-003	103.4051
<b>Total</b>	<b>0.0290</b>	<b>0.0151</b>	<b>0.2581</b>	<b>9.4000e-004</b>	<b>0.1339</b>	<b>4.5000e-004</b>	<b>0.1344</b>	<b>0.0358</b>	<b>4.1000e-004</b>	<b>0.0362</b>		<b>102.7445</b>	<b>102.7445</b>	<b>1.5500e-003</b>	<b>2.0900e-003</b>	<b>103.4051</b>

**3.7 Architectural Coating - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	24.3964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
<b>Total</b>	<b>24.5271</b>	<b>0.8563</b>	<b>1.7977</b>	<b>2.9700e-003</b>		<b>0.0203</b>	<b>0.0203</b>		<b>0.0203</b>	<b>0.0203</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0114</b>		<b>281.7328</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0245	0.0128	0.2184	8.0000e-004	0.1230	3.8000e-004	0.1233	0.0326	3.5000e-004	0.0330		86.9377	86.9377	1.3100e-003	1.7700e-003	87.4966
<b>Total</b>	<b>0.0245</b>	<b>0.0128</b>	<b>0.2184</b>	<b>8.0000e-004</b>	<b>0.1230</b>	<b>3.8000e-004</b>	<b>0.1233</b>	<b>0.0326</b>	<b>3.5000e-004</b>	<b>0.0330</b>		<b>86.9377</b>	<b>86.9377</b>	<b>1.3100e-003</b>	<b>1.7700e-003</b>	<b>87.4966</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.3964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

Construction P2 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	24.5271	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0245	0.0128	0.2184	8.0000e-004	0.1133	3.8000e-004	0.1137	0.0303	3.5000e-004	0.0306		86.9377	86.9377	1.3100e-003	1.7700e-003	87.4966
<b>Total</b>	<b>0.0245</b>	<b>0.0128</b>	<b>0.2184</b>	<b>8.0000e-004</b>	<b>0.1133</b>	<b>3.8000e-004</b>	<b>0.1137</b>	<b>0.0303</b>	<b>3.5000e-004</b>	<b>0.0306</b>		<b>86.9377</b>	<b>86.9377</b>	<b>1.3100e-003</b>	<b>1.7700e-003</b>	<b>87.4966</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction P2 - Mitigated**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	131.59	1000sqft	1.23	131,587.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2031

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information on provided by the College District.
- Trips and VMT - See Construction Phase 2 assumptions file in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.02	1.23
tblTripsAndVMT	HaulingTripNumber	367.00	368.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction**  
**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2030	0.0682	0.4532	0.7261	1.7700e-003	0.0962	8.4800e-003	0.1047	0.0256	8.4600e-003	0.0341	0.0000	152.9257	152.9257	5.9600e-003	3.9400e-003	154.2484
2031	0.1981	0.4969	0.8518	1.9400e-003	0.0447	8.8300e-003	0.0535	0.0121	8.8100e-003	0.0209	0.0000	166.2211	166.2211	6.3200e-003	3.3400e-003	167.3730
Maximum	0.1981	0.4969	0.8518	1.9400e-003	0.0962	8.8300e-003	0.1047	0.0256	8.8100e-003	0.0341	0.0000	166.2211	166.2211	6.3200e-003	3.9400e-003	167.3730

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2030	0.0682	0.4531	0.7261	1.7700e-003	0.0591	8.4800e-003	0.0675	0.0159	8.4600e-003	0.0243	0.0000	152.9256	152.9256	5.9600e-003	3.9400e-003	154.2483
2031	0.1981	0.4969	0.8518	1.9400e-003	0.0413	8.8300e-003	0.0502	0.0112	8.8100e-003	0.0200	0.0000	166.2209	166.2209	6.3200e-003	3.3400e-003	167.3729
Maximum	0.1981	0.4969	0.8518	1.9400e-003	0.0591	8.8300e-003	0.0675	0.0159	8.8100e-003	0.0243	0.0000	166.2209	166.2209	6.3200e-003	3.9400e-003	167.3729

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	28.74	0.00	25.59	28.09	0.00	19.24	0.00	0.00	0.00	0.00	0.00	0.00

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2030	10-31-2030	0.3201	0.3201
2	11-1-2030	1-31-2031	0.3049	0.3049
3	2-1-2031	4-30-2031	0.2942	0.2942
4	5-1-2031	7-31-2031	0.2951	0.2951
		Highest	0.3201	0.3201

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2030	8/28/2030	5	20	
2	Site Preparation	Site Preparation	8/29/2030	8/30/2030	5	2	
3	Grading	Grading	8/31/2030	9/5/2030	5	4	
4	Building Construction	Building Construction	9/6/2030	6/12/2031	5	200	
5	Paving	Paving	6/13/2031	6/26/2031	5	10	
6	Architectural Coating	Architectural Coating	6/27/2031	7/10/2031	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 197,381; Non-Residential Outdoor: 65,794; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	368.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	55.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2030**

**Unmitigated Construction On-Site**



**Construction P2 - Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0397	0.0000	0.0397	6.0100e-003	0.0000	6.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.0801	0.1297	2.8000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003	0.0000	24.1504	24.1504	1.0700e-003	0.0000	24.1771
<b>Total</b>	<b>0.0133</b>	<b>0.0801</b>	<b>0.1297</b>	<b>2.8000e-004</b>	<b>0.0397</b>	<b>2.1500e-003</b>	<b>0.0419</b>	<b>6.0100e-003</b>	<b>2.1500e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>24.1504</b>	<b>24.1504</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>24.1771</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	0.0203	6.1300e-003	9.0000e-005	3.1700e-003	2.0000e-004	3.3700e-003	8.7000e-004	1.9000e-004	1.0600e-003	0.0000	8.7515	8.7515	3.5000e-004	1.3900e-003	9.1735
Vendor	4.0000e-005	1.4300e-003	5.5000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6093	0.6093	1.0000e-005	9.0000e-005	0.6364
Worker	2.8000e-004	1.7000e-004	2.8000e-003	1.0000e-005	1.4300e-003	0.0000	1.4300e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.9629	0.9629	2.0000e-005	2.0000e-005	0.9693
<b>Total</b>	<b>7.3000e-004</b>	<b>0.0219</b>	<b>9.4800e-003</b>	<b>1.1000e-004</b>	<b>4.8500e-003</b>	<b>2.1000e-004</b>	<b>5.0600e-003</b>	<b>1.3200e-003</b>	<b>2.0000e-004</b>	<b>1.5200e-003</b>	<b>0.0000</b>	<b>10.3237</b>	<b>10.3237</b>	<b>3.8000e-004</b>	<b>1.5000e-003</b>	<b>10.7792</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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Fugitive Dust					0.0170	0.0000	0.0170	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.0801	0.1297	2.8000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003	0.0000	24.1504	24.1504	1.0700e-003	0.0000	24.1771
<b>Total</b>	<b>0.0133</b>	<b>0.0801</b>	<b>0.1297</b>	<b>2.8000e-004</b>	<b>0.0170</b>	<b>2.1500e-003</b>	<b>0.0191</b>	<b>2.5700e-003</b>	<b>2.1500e-003</b>	<b>4.7200e-003</b>	<b>0.0000</b>	<b>24.1504</b>	<b>24.1504</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>24.1771</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	0.0203	6.1300e-003	9.0000e-005	2.9500e-003	2.0000e-004	3.1500e-003	8.2000e-004	1.9000e-004	1.0100e-003	0.0000	8.7515	8.7515	3.5000e-004	1.3900e-003	9.1735
Vendor	4.0000e-005	1.4300e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6093	0.6093	1.0000e-005	9.0000e-005	0.6364
Worker	2.8000e-004	1.7000e-004	2.8000e-003	1.0000e-005	1.3100e-003	0.0000	1.3200e-003	3.5000e-004	0.0000	3.6000e-004	0.0000	0.9629	0.9629	2.0000e-005	2.0000e-005	0.9693
<b>Total</b>	<b>7.3000e-004</b>	<b>0.0219</b>	<b>9.4800e-003</b>	<b>1.1000e-004</b>	<b>4.5000e-003</b>	<b>2.1000e-004</b>	<b>4.7200e-003</b>	<b>1.2400e-003</b>	<b>2.0000e-004</b>	<b>1.4500e-003</b>	<b>0.0000</b>	<b>10.3237</b>	<b>10.3237</b>	<b>3.8000e-004</b>	<b>1.5000e-003</b>	<b>10.7792</b>

**3.3 Site Preparation - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-004	4.7400e-003	5.9100e-003	2.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	1.8096	1.8096	8.0000e-005	0.0000	1.8115
<b>Total</b>	<b>9.8000e-004</b>	<b>4.7400e-003</b>	<b>5.9100e-003</b>	<b>2.0000e-005</b>	<b>6.2700e-003</b>	<b>1.6000e-004</b>	<b>6.4300e-003</b>	<b>3.0000e-003</b>	<b>1.6000e-004</b>	<b>3.1600e-003</b>	<b>0.0000</b>	<b>1.8096</b>	<b>1.8096</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.8115</b>

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**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0609	0.0609	0.0000	1.0000e-005	0.0636
Worker	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0593	0.0593	0.0000	0.0000	0.0597
<b>Total</b>	<b>2.0000e-005</b>	<b>1.5000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1233</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6800e-003	0.0000	2.6800e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-004	4.7400e-003	5.9100e-003	2.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	1.8096	1.8096	8.0000e-005	0.0000	1.8115
<b>Total</b>	<b>9.8000e-004</b>	<b>4.7400e-003</b>	<b>5.9100e-003</b>	<b>2.0000e-005</b>	<b>2.6800e-003</b>	<b>1.6000e-004</b>	<b>2.8400e-003</b>	<b>1.2800e-003</b>	<b>1.6000e-004</b>	<b>1.4400e-003</b>	<b>0.0000</b>	<b>1.8096</b>	<b>1.8096</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.8115</b>

**Mitigated Construction Off-Site**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0609	0.0609	0.0000	1.0000e-005	0.0636
Worker	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0593	0.0593	0.0000	0.0000	0.0597
<b>Total</b>	<b>2.0000e-005</b>	<b>1.5000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1233</b>

**3.4 Grading - 2030**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0118	0.0159	5.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	4.3332	4.3332	1.9000e-004	0.0000	4.3380
<b>Total</b>	<b>2.3500e-003</b>	<b>0.0118</b>	<b>0.0159</b>	<b>5.0000e-005</b>	<b>0.0142</b>	<b>3.7000e-004</b>	<b>0.0145</b>	<b>6.8500e-003</b>	<b>3.7000e-004</b>	<b>7.2200e-003</b>	<b>0.0000</b>	<b>4.3332</b>	<b>4.3332</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.3380</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.3000e-004	1.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1828	0.1828	0.0000	3.0000e-005	0.1909
Worker	4.0000e-005	3.0000e-005	4.3000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1481	0.1481	0.0000	0.0000	0.1491
<b>Total</b>	<b>5.0000e-005</b>	<b>4.6000e-004</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.3309</b>	<b>0.3309</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.3401</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0600e-003	0.0000	6.0600e-003	2.9300e-003	0.0000	2.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0118	0.0159	5.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	4.3332	4.3332	1.9000e-004	0.0000	4.3380
<b>Total</b>	<b>2.3500e-003</b>	<b>0.0118</b>	<b>0.0159</b>	<b>5.0000e-005</b>	<b>6.0600e-003</b>	<b>3.7000e-004</b>	<b>6.4300e-003</b>	<b>2.9300e-003</b>	<b>3.7000e-004</b>	<b>3.3000e-003</b>	<b>0.0000</b>	<b>4.3332</b>	<b>4.3332</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.3380</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.3000e-004	1.7000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1828	0.1828	0.0000	3.0000e-005	0.1909
Worker	4.0000e-005	3.0000e-005	4.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1481	0.1481	0.0000	0.0000	0.1491

Construction P2 - Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	5.0000e-005	4.6000e-004	6.0000e-004	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.3309	0.3309	0.0000	3.0000e-005	0.3401
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3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0449	0.2983	0.5026	9.9000e-004		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003	0.0000	81.0436	81.0436	3.6300e-003	0.0000	81.1343
<b>Total</b>	<b>0.0449</b>	<b>0.2983</b>	<b>0.5026</b>	<b>9.9000e-004</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>	<b>0.0000</b>	<b>81.0436</b>	<b>81.0436</b>	<b>3.6300e-003</b>	<b>0.0000</b>	<b>81.1343</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0327	0.0126	1.4000e-004	5.7600e-003	2.3000e-004	5.9900e-003	1.6600e-003	2.2000e-004	1.8800e-003	0.0000	13.9082	13.9082	3.4000e-004	2.0500e-003	14.5266
Worker	4.9900e-003	2.9900e-003	0.0491	1.7000e-004	0.0250	8.0000e-005	0.0251	6.6500e-003	8.0000e-005	6.7200e-003	0.0000	16.9059	16.9059	2.7000e-004	3.5000e-004	17.0184
<b>Total</b>	<b>5.9100e-003</b>	<b>0.0357</b>	<b>0.0617</b>	<b>3.1000e-004</b>	<b>0.0308</b>	<b>3.1000e-004</b>	<b>0.0311</b>	<b>8.3100e-003</b>	<b>3.0000e-004</b>	<b>8.6000e-003</b>	<b>0.0000</b>	<b>30.8141</b>	<b>30.8141</b>	<b>6.1000e-004</b>	<b>2.4000e-003</b>	<b>31.5450</b>

Mitigated Construction On-Site

**Construction P2 - Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0449	0.2983	0.5026	9.9000e-004		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003	0.0000	81.0435	81.0435	3.6300e-003	0.0000	81.1342
<b>Total</b>	<b>0.0449</b>	<b>0.2983</b>	<b>0.5026</b>	<b>9.9000e-004</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>		<b>5.2700e-003</b>	<b>5.2700e-003</b>	<b>0.0000</b>	<b>81.0435</b>	<b>81.0435</b>	<b>3.6300e-003</b>	<b>0.0000</b>	<b>81.1342</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0327	0.0126	1.4000e-004	5.3900e-003	2.3000e-004	5.6200e-003	1.5700e-003	2.2000e-004	1.7900e-003	0.0000	13.9082	13.9082	3.4000e-004	2.0500e-003	14.5266
Worker	4.9900e-003	2.9900e-003	0.0491	1.7000e-004	0.0231	8.0000e-005	0.0232	6.1700e-003	8.0000e-005	6.2400e-003	0.0000	16.9059	16.9059	2.7000e-004	3.5000e-004	17.0184
<b>Total</b>	<b>5.9100e-003</b>	<b>0.0357</b>	<b>0.0617</b>	<b>3.1000e-004</b>	<b>0.0285</b>	<b>3.1000e-004</b>	<b>0.0288</b>	<b>7.7400e-003</b>	<b>3.0000e-004</b>	<b>8.0300e-003</b>	<b>0.0000</b>	<b>30.8141</b>	<b>30.8141</b>	<b>6.1000e-004</b>	<b>2.4000e-003</b>	<b>31.5450</b>

**3.5 Building Construction - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0633	0.4205	0.7084	1.3900e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	114.2422	114.2422	5.1100e-003	0.0000	114.3700

Construction P2 - Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.0633	0.4205	0.7084	1.3900e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	114.2422	114.2422	5.1100e-003	0.0000	114.3700
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0461	0.0177	2.0000e-004	8.1200e-003	3.2000e-004	8.4300e-003	2.3400e-003	3.0000e-004	2.6500e-003	0.0000	19.2679	19.2679	4.6000e-004	2.8300e-003	20.1238
Worker	6.5800e-003	3.9100e-003	0.0670	2.4000e-004	0.0353	1.1000e-004	0.0354	9.3700e-003	1.0000e-004	9.4700e-003	0.0000	23.5221	23.5221	3.5000e-004	4.8000e-004	23.6749
<b>Total</b>	<b>7.8700e-003</b>	<b>0.0500</b>	<b>0.0846</b>	<b>4.4000e-004</b>	<b>0.0434</b>	<b>4.3000e-004</b>	<b>0.0438</b>	<b>0.0117</b>	<b>4.0000e-004</b>	<b>0.0121</b>	<b>0.0000</b>	<b>42.7899</b>	<b>42.7899</b>	<b>8.1000e-004</b>	<b>3.3100e-003</b>	<b>43.7987</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0633	0.4205	0.7084	1.3900e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	114.2420	114.2420	5.1100e-003	0.0000	114.3699
<b>Total</b>	<b>0.0633</b>	<b>0.4205</b>	<b>0.7084</b>	<b>1.3900e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>114.2420</b>	<b>114.2420</b>	<b>5.1100e-003</b>	<b>0.0000</b>	<b>114.3699</b>

Mitigated Construction Off-Site



**Construction P2 - Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0461	0.0177	2.0000e-004	7.6000e-003	3.2000e-004	7.9200e-003	2.2200e-003	3.0000e-004	2.5200e-003	0.0000	19.2679	19.2679	4.6000e-004	2.8300e-003	20.1238
Worker	6.5800e-003	3.9100e-003	0.0670	2.4000e-004	0.0325	1.1000e-004	0.0326	8.6900e-003	1.0000e-004	8.8000e-003	0.0000	23.5221	23.5221	3.5000e-004	4.8000e-004	23.6749
<b>Total</b>	<b>7.8700e-003</b>	<b>0.0500</b>	<b>0.0846</b>	<b>4.4000e-004</b>	<b>0.0401</b>	<b>4.3000e-004</b>	<b>0.0406</b>	<b>0.0109</b>	<b>4.0000e-004</b>	<b>0.0113</b>	<b>0.0000</b>	<b>42.7899</b>	<b>42.7899</b>	<b>8.1000e-004</b>	<b>3.3100e-003</b>	<b>43.7987</b>

**3.6 Paving - 2031**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0800e-003	0.0220	0.0473	8.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	7.0351	7.0351	3.3000e-004	0.0000	7.0434
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.0800e-003</b>	<b>0.0220</b>	<b>0.0473</b>	<b>8.0000e-005</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>7.0351</b>	<b>7.0351</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>7.0434</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction P2 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	1.3500e-003	0.0000	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4752	0.4752	1.0000e-005	1.0000e-005	0.4783
<b>Total</b>	<b>1.3000e-004</b>	<b>8.0000e-005</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.4752</b>	<b>0.4752</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4783</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0800e-003	0.0220	0.0473	8.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	7.0351	7.0351	3.3000e-004	0.0000	7.0434
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.0800e-003</b>	<b>0.0220</b>	<b>0.0473</b>	<b>8.0000e-005</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>		<b>8.6000e-004</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>7.0351</b>	<b>7.0351</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>7.0434</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	1.3500e-003	0.0000	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4752	0.4752	1.0000e-005	1.0000e-005	0.4783

Construction P2 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	1.3000e-004	8.0000e-005	1.3500e-003	0.0000	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4752	0.4752	1.0000e-005	1.0000e-005	0.4783
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**3.7 Architectural Coating - 2031**  
**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-004	4.2800e-003	8.9900e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.2766	1.2766	5.0000e-005	0.0000	1.2779
<b>Total</b>	<b>0.1226</b>	<b>4.2800e-003</b>	<b>8.9900e-003</b>	<b>1.0000e-005</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.2779</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	1.1400e-003	0.0000	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4021	0.4021	1.0000e-005	1.0000e-005	0.4047
<b>Total</b>	<b>1.1000e-004</b>	<b>7.0000e-005</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.4021</b>	<b>0.4021</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4047</b>

Construction P2 - Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-004	4.2800e-003	8.9900e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.2766	1.2766	5.0000e-005	0.0000	1.2779
<b>Total</b>	<b>0.1226</b>	<b>4.2800e-003</b>	<b>8.9900e-003</b>	<b>1.0000e-005</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.2779</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	1.1400e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4021	0.4021	1.0000e-005	1.0000e-005	0.4047
<b>Total</b>	<b>1.1000e-004</b>	<b>7.0000e-005</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>5.6000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.4021</b>	<b>0.4021</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4047</b>

**Construction P2 - Mitigated**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0		1	0.00
Cement and Mortar Mixers	Diesel	No Change	0		1	0.00
Concrete/Industrial Saws	Diesel	No Change	0		1	0.00
Cranes	Diesel	No Change	0		1	0.00
Forklifts	Diesel	No Change	0		1	0.00
Generator Sets	Diesel	No Change	0		1	0.00
Graders	Diesel	No Change	0		2	0.00
Pavers	Diesel	No Change	0		1	0.00
Paving Equipment	Diesel	No Change	0		1	0.00
Rollers	Diesel	No Change	0		1	0.00
Rubber Tired Dozers	Diesel	No Change	0		3	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0		8	0.00
Welders	Diesel	No Change	0		3	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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**Construction P2 - Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	6.50000E-004	4.28000E-003	8.99000E-003	1.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	1.27663E+000	1.27663E+000	5.00000E-005	0.00000E+000	1.27792E+000
Cement and Mortar	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Mixers Concrete/Industrial	2.30000E-003	1.73800E-002	3.62900E-002	6.00000E-005	3.80000E-004	3.80000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.80000E-004	0.00000E+000	5.38106E+000
Saws Cranes	1.98500E-002	6.62800E-002	1.01640E-001	5.30000E-004	2.13000E-003	2.13000E-003	0.00000E+000	4.56844E+001	4.56844E+001	1.61000E-003	0.00000E+000	4.57246E+001
Forklifts	6.66000E-003	3.66100E-002	8.94500E-002	1.40000E-004	4.90000E-004	4.90000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.30000E-004	0.00000E+000	1.21522E+001
Generator Sets	1.95100E-002	1.80340E-001	3.63540E-001	6.60000E-004	3.73000E-003	3.73000E-003	0.00000E+000	5.65208E+001	5.65208E+001	1.59000E-003	0.00000E+000	5.65605E+001
Graders	8.80000E-004	2.77000E-003	4.66000E-003	2.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	2.09143E+000	2.09143E+000	7.00000E-005	0.00000E+000	2.09318E+000
Pavers	1.08000E-003	5.15000E-003	1.20100E-002	2.00000E-005	2.70000E-004	2.70000E-004	0.00000E+000	1.86175E+000	1.86175E+000	9.00000E-005	0.00000E+000	1.86396E+000
Paving Equipment	1.22000E-003	5.71000E-003	1.38500E-002	3.00000E-005	2.90000E-004	2.90000E-004	0.00000E+000	2.16045E+000	2.16045E+000	1.00000E-004	0.00000E+000	2.16292E+000
Rollers	7.00000E-004	4.57000E-003	8.54000E-003	1.00000E-005	1.50000E-004	1.50000E-004	0.00000E+000	1.20934E+000	1.20934E+000	6.00000E-005	0.00000E+000	1.21078E+000
Rubber Tired Dozers	7.52000E-003	4.10100E-002	2.96600E-002	1.30000E-004	1.55000E-003	1.55000E-003	0.00000E+000	1.15665E+001	1.15665E+001	6.10000E-004	0.00000E+000	1.15817E+001
Tractors/Loaders/Backhoes	1.97100E-002	1.17700E-001	2.68530E-001	4.30000E-004	2.17000E-003	2.17000E-003	0.00000E+000	3.73659E+001	3.73659E+001	1.58000E-003	0.00000E+000	3.74054E+001
Welders	4.91800E-002	3.58480E-001	4.80490E-001	7.70000E-004	4.93000E-003	4.93000E-003	0.00000E+000	5.64662E+001	5.64662E+001	3.97000E-003	0.00000E+000	5.65656E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	6.50000E-004	4.28000E-003	8.99000E-003	1.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	1.27663E+000	1.27663E+000	5.00000E-005	0.00000E+000	1.27792E+000
Cement and Mortar	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Mixers Concrete/Industrial	2.30000E-003	1.73800E-002	3.62900E-002	6.00000E-005	3.80000E-004	3.80000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.80000E-004	0.00000E+000	5.38105E+000
Saws Cranes	1.98500E-002	6.62800E-002	1.01640E-001	5.30000E-004	2.13000E-003	2.13000E-003	0.00000E+000	4.56844E+001	4.56844E+001	1.61000E-003	0.00000E+000	4.57246E+001
Forklifts	6.66000E-003	3.66100E-002	8.94500E-002	1.40000E-004	4.90000E-004	4.90000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.30000E-004	0.00000E+000	1.21522E+001
Generator Sets	1.95100E-002	1.80340E-001	3.63540E-001	6.60000E-004	3.73000E-003	3.73000E-003	0.00000E+000	5.65207E+001	5.65207E+001	1.59000E-003	0.00000E+000	5.65605E+001
Graders	8.80000E-004	2.77000E-003	4.66000E-003	2.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	2.09143E+000	2.09143E+000	7.00000E-005	0.00000E+000	2.09318E+000
Pavers	1.08000E-003	5.15000E-003	1.20100E-002	2.00000E-005	2.70000E-004	2.70000E-004	0.00000E+000	1.86175E+000	1.86175E+000	9.00000E-005	0.00000E+000	1.86396E+000
Paving Equipment	1.22000E-003	5.71000E-003	1.38500E-002	3.00000E-005	2.90000E-004	2.90000E-004	0.00000E+000	2.16044E+000	2.16044E+000	1.00000E-004	0.00000E+000	2.16291E+000
Rollers	7.00000E-004	4.57000E-003	8.54000E-003	1.00000E-005	1.50000E-004	1.50000E-004	0.00000E+000	1.20934E+000	1.20934E+000	6.00000E-005	0.00000E+000	1.21078E+000
Rubber Tired Dozers	7.52000E-003	4.10100E-002	2.96600E-002	1.30000E-004	1.55000E-003	1.55000E-003	0.00000E+000	1.15665E+001	1.15665E+001	6.10000E-004	0.00000E+000	1.15817E+001
Tractors/Loaders/Backhoes	1.97100E-002	1.17700E-001	2.68530E-001	4.30000E-004	2.17000E-003	2.17000E-003	0.00000E+000	3.73659E+001	3.73659E+001	1.58000E-003	0.00000E+000	3.74053E+001
Welders	4.91800E-002	3.58480E-001	4.80490E-001	7.70000E-004	4.93000E-003	4.93000E-003	0.00000E+000	5.64661E+001	5.64661E+001	3.97000E-003	0.00000E+000	5.65655E+001

**Construction P2 - Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85837E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.09447E-006	1.09447E-006	0.00000E+000	0.00000E+000	1.09350E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64760E-006	1.64760E-006	0.00000E+000	0.00000E+000	1.64579E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23848E-006	1.23848E-006	0.00000E+000	0.00000E+000	1.23761E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.62867E-006	4.62867E-006	0.00000E+000	0.00000E+000	4.62338E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.72913E-006	1.72913E-006	0.00000E+000	0.00000E+000	8.63428E-007
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07049E-006	1.07049E-006	0.00000E+000	0.00000E+000	1.06936E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23968E-006	1.23968E-006	0.00000E+000	0.00000E+000	1.23750E-006

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00
Yes	Clean Paved Road	% PM Reduction	9.00		
				Frequency (per day)	2.00

**Construction P2 - Mitigated**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.07	0.06
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.07	0.02	0.07	0.02	0.08	0.07
Demolition	Fugitive Dust	0.04	0.01	0.02	0.00	0.57	0.57
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.06
Grading	Fugitive Dust	0.01	0.01	0.01	0.00	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.10	0.13
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.07	0.05
Site Preparation	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.17	0.00



# CalEEMod Output: Phase 3 Construction

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Construction Phase 3 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 3**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	50.14	1000sqft	0.30	50,136.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2040

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Based on information provided by the College District.  
 Construction Phase -  
 Trips and VMT - See Construction Phase 3 assumptions worksheet in the AQ/GHG appendix of the DEIR.  
 Construction Off-road Equipment Mitigation - Baesd on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	1.15	0.30
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

**Construction Phase 3 - San Bernardino-South Coast County, Summer**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	93.0772	3.4862	7.8578	0.0184	5.4270	0.1072	5.5156	2.5996	0.1071	2.6882	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324
Maximum	93.0772	3.4862	7.8578	0.0184	5.4270	0.1072	5.5156	2.5996	0.1071	2.6882	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	93.0772	3.4862	7.8578	0.0184	2.3773	0.1072	2.4659	1.1270	0.1071	1.2156	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324
Maximum	93.0772	3.4862	7.8578	0.0184	2.3773	0.1072	2.4659	1.1270	0.1071	1.2156	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.20	0.00	55.29	56.65	0.00	54.78	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/13/2038	2/15/2038	5	1	
2	Grading	Grading	2/16/2038	2/17/2038	5	2	

Construction Phase 3 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

3	Building Construction	Building Construction	2/18/2038	7/7/2038	5	100
4	Paving	Paving	7/8/2038	7/14/2038	5	5
5	Architectural Coating	Architectural Coating	7/15/2038	7/21/2038	5	5

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,204; Non-Residential Outdoor: 25,068; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Construction Phase 3 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343		1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0343</b>	<b>0.5646</b>	<b>0.0573</b>	<b>0.0343</b>	<b>0.0916</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0700e-003	0.0673	0.0270	2.9000e-004	0.0128	4.9000e-004	0.0133	3.6900e-003	4.6000e-004	4.1500e-003		31.2614	31.2614	7.3000e-004	4.5800e-003	32.6457
Worker	8.9500e-003	4.4700e-003	0.1063	3.8000e-004	0.0559	1.4000e-004	0.0560	0.0148	1.2000e-004	0.0150		41.8087	41.8087	4.4000e-004	7.1000e-004	42.0314
<b>Total</b>	<b>0.0110</b>	<b>0.0718</b>	<b>0.1332</b>	<b>6.7000e-004</b>	<b>0.0687</b>	<b>6.3000e-004</b>	<b>0.0693</b>	<b>0.0185</b>	<b>5.8000e-004</b>	<b>0.0191</b>		<b>73.0702</b>	<b>73.0702</b>	<b>1.1700e-003</b>	<b>5.2900e-003</b>	<b>74.6771</b>

**Construction Phase 3 - San Bernardino-South Coast County, Summer**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343	0.0000	1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0343</b>	<b>0.2610</b>	<b>0.0245</b>	<b>0.0343</b>	<b>0.0588</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0700e-003	0.0673	0.0270	2.9000e-004	0.0120	4.9000e-004	0.0125	3.4900e-003	4.6000e-004	3.9500e-003		31.2614	31.2614	7.3000e-004	4.5800e-003	32.6457
Worker	8.9500e-003	4.4700e-003	0.1063	3.8000e-004	0.0515	1.4000e-004	0.0517	0.0138	1.2000e-004	0.0139		41.8087	41.8087	4.4000e-004	7.1000e-004	42.0314
<b>Total</b>	<b>0.0110</b>	<b>0.0718</b>	<b>0.1332</b>	<b>6.7000e-004</b>	<b>0.0635</b>	<b>6.3000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.8000e-004</b>	<b>0.0178</b>		<b>73.0702</b>	<b>73.0702</b>	<b>1.1700e-003</b>	<b>5.2900e-003</b>	<b>74.6771</b>

**3.3 Grading - 2038**

**Unmitigated Construction On-Site**

Construction Phase 3 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874		1,633.8245	1,633.8245	0.0627		1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>5.3119</b>	<b>0.0874</b>	<b>5.3994</b>	<b>2.5686</b>	<b>0.0874</b>	<b>2.6560</b>		<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>		<b>1,635.3908</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1346	0.0540	5.8000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.3000e-004	8.3100e-003		62.5229	62.5229	1.4600e-003	9.1700e-003	65.2914
Worker	0.0143	7.1500e-003	0.1700	6.0000e-004	0.0894	2.2000e-004	0.0896	0.0237	2.0000e-004	0.0239		66.8940	66.8940	7.1000e-004	1.1400e-003	67.2502
<b>Total</b>	<b>0.0185</b>	<b>0.1417</b>	<b>0.2240</b>	<b>1.1800e-003</b>	<b>0.1150</b>	<b>1.1900e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.1300e-003</b>	<b>0.0322</b>		<b>129.4168</b>	<b>129.4168</b>	<b>2.1700e-003</b>	<b>0.0103</b>	<b>132.5417</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					



Construction Phase 3 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000		0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874	0.0000	1,633.8245	1,633.8245	0.0627	1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0874</b>	<b>2.3583</b>	<b>1.0981</b>	<b>0.0874</b>	<b>1.1855</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>	<b>1,635.3908</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1346	0.0540	5.8000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.3000e-004	7.9000e-003		62.5229	62.5229	1.4600e-003	9.1700e-003	65.2914
Worker	0.0143	7.1500e-003	0.1700	6.0000e-004	0.0824	2.2000e-004	0.0826	0.0220	2.0000e-004	0.0222		66.8940	66.8940	7.1000e-004	1.1400e-003	67.2502
<b>Total</b>	<b>0.0185</b>	<b>0.1417</b>	<b>0.2240</b>	<b>1.1800e-003</b>	<b>0.1064</b>	<b>1.1900e-003</b>	<b>0.1076</b>	<b>0.0290</b>	<b>1.1300e-003</b>	<b>0.0301</b>		<b>129.4168</b>	<b>129.4168</b>	<b>2.1700e-003</b>	<b>0.0103</b>	<b>132.5417</b>

**3.4 Building Construction - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423		1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

**Construction Phase 3 - San Bernardino-South Coast County, Summer**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2600e-003	0.2692	0.1079	1.1700e-003	0.0513	1.9400e-003	0.0532	0.0148	1.8600e-003	0.0166		125.0458	125.0458	2.9200e-003	0.0183	130.5828
Worker	0.0376	0.0188	0.4463	1.5800e-003	0.2347	5.7000e-004	0.2353	0.0623	5.2000e-004	0.0628		175.5966	175.5966	1.8700e-003	2.9800e-003	176.5319
<b>Total</b>	<b>0.0458</b>	<b>0.2880</b>	<b>0.5542</b>	<b>2.7500e-003</b>	<b>0.2860</b>	<b>2.5100e-003</b>	<b>0.2885</b>	<b>0.0770</b>	<b>2.3800e-003</b>	<b>0.0794</b>		<b>300.6424</b>	<b>300.6424</b>	<b>4.7900e-003</b>	<b>0.0213</b>	<b>307.1147</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423	0.0000	1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 3 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	8.2600e-003	0.2692	0.1079	1.1700e-003	0.0480	1.9400e-003	0.0499	0.0140	1.8600e-003	0.0158	125.0458	125.0458	2.9200e-003	0.0183	130.5828	
Worker	0.0376	0.0188	0.4463	1.5800e-003	0.2164	5.7000e-004	0.2169	0.0577	5.2000e-004	0.0583	175.5966	175.5966	1.8700e-003	2.9800e-003	176.5319	
<b>Total</b>	<b>0.0458</b>	<b>0.2880</b>	<b>0.5542</b>	<b>2.7500e-003</b>	<b>0.2643</b>	<b>2.5100e-003</b>	<b>0.2668</b>	<b>0.0717</b>	<b>2.3800e-003</b>	<b>0.0741</b>	<b>300.6424</b>	<b>300.6424</b>	<b>4.7900e-003</b>	<b>0.0213</b>	<b>307.1147</b>	

3.5 Paving - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067		1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0322	0.0161	0.3826	1.3500e-003	0.2012	4.9000e-004	0.2017	0.0534	4.5000e-004	0.0538		150.5114	150.5114	1.6000e-003	2.5600e-003	151.3130
<b>Total</b>	<b>0.0322</b>	<b>0.0161</b>	<b>0.3826</b>	<b>1.3500e-003</b>	<b>0.2012</b>	<b>4.9000e-004</b>	<b>0.2017</b>	<b>0.0534</b>	<b>4.5000e-004</b>	<b>0.0538</b>		<b>150.5114</b>	<b>150.5114</b>	<b>1.6000e-003</b>	<b>2.5600e-003</b>	<b>151.3130</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067	0.0000	1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0322	0.0161	0.3826	1.3500e-003	0.1855	4.9000e-004	0.1859	0.0495	4.5000e-004	0.0499		150.5114	150.5114	1.6000e-003	2.5600e-003	151.3130
<b>Total</b>	<b>0.0322</b>	<b>0.0161</b>	<b>0.3826</b>	<b>1.3500e-003</b>	<b>0.1855</b>	<b>4.9000e-004</b>	<b>0.1859</b>	<b>0.0495</b>	<b>4.5000e-004</b>	<b>0.0499</b>		<b>150.5114</b>	<b>150.5114</b>	<b>1.6000e-003</b>	<b>2.5600e-003</b>	<b>151.3130</b>

Construction Phase 3 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.6 Architectural Coating - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	92.9521					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104			281.7081
<b>Total</b>	<b>93.0700</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>			<b>281.7081</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1600e-003	3.5800e-003	0.0850	3.0000e-004	0.0447	1.1000e-004	0.0448	0.0119	1.0000e-004	0.0120		33.4470	33.4470	3.6000e-004	5.7000e-004	33.6251
<b>Total</b>	<b>7.1600e-003</b>	<b>3.5800e-003</b>	<b>0.0850</b>	<b>3.0000e-004</b>	<b>0.0447</b>	<b>1.1000e-004</b>	<b>0.0448</b>	<b>0.0119</b>	<b>1.0000e-004</b>	<b>0.0120</b>		<b>33.4470</b>	<b>33.4470</b>	<b>3.6000e-004</b>	<b>5.7000e-004</b>	<b>33.6251</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 3 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day								lb/day							
Archit. Coating	92.9521					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.7081
<b>Total</b>	<b>93.0700</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>		<b>281.7081</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1600e-003	3.5800e-003	0.0850	3.0000e-004	0.0412	1.1000e-004	0.0413	0.0110	1.0000e-004	0.0111		33.4470	33.4470	3.6000e-004	5.7000e-004	33.6251
<b>Total</b>	<b>7.1600e-003</b>	<b>3.5800e-003</b>	<b>0.0850</b>	<b>3.0000e-004</b>	<b>0.0412</b>	<b>1.1000e-004</b>	<b>0.0413</b>	<b>0.0110</b>	<b>1.0000e-004</b>	<b>0.0111</b>		<b>33.4470</b>	<b>33.4470</b>	<b>3.6000e-004</b>	<b>5.7000e-004</b>	<b>33.6251</b>

Construction Phase 3 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction Phase 3**  
San Bernardino-South Coast County, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	50.14	1000sqft	0.30	50,136.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2040

**Utility Company**

<b>CO2 Intensity (lb/MWahr)</b>	0	<b>CH4 Intensity (lb/MWahr)</b>	0	<b>N2O Intensity (lb/MWahr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Based on information provided by the College District.  
 Construction Phase -  
 Trips and VMT - See Construction Phase 3 assumptions worksheet in the AQ/GHG appendix of the DEIR.  
 Construction Off-road Equipment Mitigation - Baesd on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	1.15	0.30
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

Construction Phase 3 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	93.0771	3.4870	7.7919	0.0184	5.4270	0.1072	5.5156	2.5996	0.1071	2.6882	0.0000	1,757.1698	1,757.1698	0.0648	0.0215	1,761.8796
Maximum	93.0771	3.4870	7.7919	0.0184	5.4270	0.1072	5.5156	2.5996	0.1071	2.6882	0.0000	1,757.1698	1,757.1698	0.0648	0.0215	1,761.8796

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	93.0771	3.4870	7.7919	0.0184	2.3773	0.1072	2.4659	1.1270	0.1071	1.2156	0.0000	1,757.1698	1,757.1698	0.0648	0.0215	1,761.8796
Maximum	93.0771	3.4870	7.7919	0.0184	2.3773	0.1072	2.4659	1.1270	0.1071	1.2156	0.0000	1,757.1698	1,757.1698	0.0648	0.0215	1,761.8796

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.20	0.00	55.29	56.65	0.00	54.78	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/13/2038	2/15/2038	5	1	
2	Grading	Grading	2/16/2038	2/17/2038	5	2	



Construction Phase 3 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

3	Building Construction	Building Construction	2/18/2038	7/7/2038	5	100
4	Paving	Paving	7/8/2038	7/14/2038	5	5
5	Architectural Coating	Architectural Coating	7/15/2038	7/21/2038	5	5

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,204; Non-Residential Outdoor: 25,068; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Construction Phase 3 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343		1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0343</b>	<b>0.5646</b>	<b>0.0573</b>	<b>0.0343</b>	<b>0.0916</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-003	0.0711	0.0278	2.9000e-004	0.0128	4.9000e-004	0.0133	3.6900e-003	4.7000e-004	4.1500e-003		31.3430	31.3430	7.2000e-004	4.6000e-003	32.7314
Worker	8.8300e-003	4.6800e-003	0.0880	3.4000e-004	0.0559	1.4000e-004	0.0560	0.0148	1.2000e-004	0.0150		37.9121	37.9121	4.6000e-004	7.3000e-004	38.1413
<b>Total</b>	<b>0.0107</b>	<b>0.0758</b>	<b>0.1158</b>	<b>6.3000e-004</b>	<b>0.0687</b>	<b>6.3000e-004</b>	<b>0.0693</b>	<b>0.0185</b>	<b>5.9000e-004</b>	<b>0.0191</b>		<b>69.2551</b>	<b>69.2551</b>	<b>1.1800e-003</b>	<b>5.3300e-003</b>	<b>70.8727</b>

Construction Phase 3 - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343	0.0000	1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0343</b>	<b>0.2610</b>	<b>0.0245</b>	<b>0.0343</b>	<b>0.0588</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-003	0.0711	0.0278	2.9000e-004	0.0120	4.9000e-004	0.0125	3.4900e-003	4.7000e-004	3.9500e-003		31.3430	31.3430	7.2000e-004	4.6000e-003	32.7314
Worker	8.8300e-003	4.6800e-003	0.0880	3.4000e-004	0.0515	1.4000e-004	0.0517	0.0138	1.2000e-004	0.0139		37.9121	37.9121	4.6000e-004	7.3000e-004	38.1413
<b>Total</b>	<b>0.0107</b>	<b>0.0758</b>	<b>0.1158</b>	<b>6.3000e-004</b>	<b>0.0635</b>	<b>6.3000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.9000e-004</b>	<b>0.0178</b>		<b>69.2551</b>	<b>69.2551</b>	<b>1.1800e-003</b>	<b>5.3300e-003</b>	<b>70.8727</b>

**3.3 Grading - 2038**

**Unmitigated Construction On-Site**

Construction Phase 3 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874		1,633.8245	1,633.8245	0.0627		1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>5.3119</b>	<b>0.0874</b>	<b>5.3994</b>	<b>2.5686</b>	<b>0.0874</b>	<b>2.6560</b>		<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>		<b>1,635.3908</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7900e-003	0.1423	0.0557	5.9000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.3000e-004	8.3100e-003		62.6861	62.6861	1.4400e-003	9.2000e-003	65.4628
Worker	0.0141	7.4900e-003	0.1408	5.5000e-004	0.0894	2.2000e-004	0.0896	0.0237	2.0000e-004	0.0239		60.6593	60.6593	7.3000e-004	1.1700e-003	61.0260
<b>Total</b>	<b>0.0179</b>	<b>0.1498</b>	<b>0.1964</b>	<b>1.1400e-003</b>	<b>0.1150</b>	<b>1.1900e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.1300e-003</b>	<b>0.0322</b>		<b>123.3454</b>	<b>123.3454</b>	<b>2.1700e-003</b>	<b>0.0104</b>	<b>126.4888</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 3 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000		0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874	0.0000	1,633.8245	1,633.8245	0.0627	1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0874</b>	<b>2.3583</b>	<b>1.0981</b>	<b>0.0874</b>	<b>1.1855</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>	<b>1,635.3908</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7900e-003	0.1423	0.0557	5.9000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.3000e-004	7.9100e-003		62.6861	62.6861	1.4400e-003	9.2000e-003	65.4628
Worker	0.0141	7.4900e-003	0.1408	5.5000e-004	0.0824	2.2000e-004	0.0826	0.0220	2.0000e-004	0.0222		60.6593	60.6593	7.3000e-004	1.1700e-003	61.0260
<b>Total</b>	<b>0.0179</b>	<b>0.1498</b>	<b>0.1964</b>	<b>1.1400e-003</b>	<b>0.1064</b>	<b>1.1900e-003</b>	<b>0.1076</b>	<b>0.0290</b>	<b>1.1300e-003</b>	<b>0.0301</b>		<b>123.3454</b>	<b>123.3454</b>	<b>2.1700e-003</b>	<b>0.0104</b>	<b>126.4888</b>

**3.4 Building Construction - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423		1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

Construction Phase 3 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5800e-003	0.2846	0.1113	1.1700e-003	0.0513	1.9500e-003	0.0532	0.0148	1.8600e-003	0.0166		125.3721	125.3721	2.8900e-003	0.0184	130.9257
Worker	0.0371	0.0197	0.3695	1.4300e-003	0.2347	5.7000e-004	0.2353	0.0623	5.2000e-004	0.0628		159.2307	159.2307	1.9100e-003	3.0700e-003	160.1933
<b>Total</b>	<b>0.0447</b>	<b>0.3042</b>	<b>0.4808</b>	<b>2.6000e-003</b>	<b>0.2860</b>	<b>2.5200e-003</b>	<b>0.2885</b>	<b>0.0770</b>	<b>2.3800e-003</b>	<b>0.0794</b>		<b>284.6028</b>	<b>284.6028</b>	<b>4.8000e-003</b>	<b>0.0215</b>	<b>291.1189</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423	0.0000	1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 3 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	7.5800e-003	0.2846	0.1113	1.1700e-003	0.0480	1.9500e-003	0.0499	0.0140	1.8600e-003	0.0158	125.3721	125.3721	2.8900e-003	0.0184	130.9257	
Worker	0.0371	0.0197	0.3695	1.4300e-003	0.2164	5.7000e-004	0.2169	0.0577	5.2000e-004	0.0583	159.2307	159.2307	1.9100e-003	3.0700e-003	160.1933	
<b>Total</b>	<b>0.0447</b>	<b>0.3042</b>	<b>0.4808</b>	<b>2.6000e-003</b>	<b>0.2643</b>	<b>2.5200e-003</b>	<b>0.2668</b>	<b>0.0717</b>	<b>2.3800e-003</b>	<b>0.0741</b>	<b>284.6028</b>	<b>284.6028</b>	<b>4.8000e-003</b>	<b>0.0215</b>	<b>291.1189</b>	

**3.5 Paving - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067		1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0318	0.0169	0.3167	1.2300e-003	0.2012	4.9000e-004	0.2017	0.0534	4.5000e-004	0.0538		136.4834	136.4834	1.6400e-003	2.6300e-003	137.3085
<b>Total</b>	<b>0.0318</b>	<b>0.0169</b>	<b>0.3167</b>	<b>1.2300e-003</b>	<b>0.2012</b>	<b>4.9000e-004</b>	<b>0.2017</b>	<b>0.0534</b>	<b>4.5000e-004</b>	<b>0.0538</b>		<b>136.4834</b>	<b>136.4834</b>	<b>1.6400e-003</b>	<b>2.6300e-003</b>	<b>137.3085</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067	0.0000	1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0318	0.0169	0.3167	1.2300e-003	0.1855	4.9000e-004	0.1859	0.0495	4.5000e-004	0.0499		136.4834	136.4834	1.6400e-003	2.6300e-003	137.3085
<b>Total</b>	<b>0.0318</b>	<b>0.0169</b>	<b>0.3167</b>	<b>1.2300e-003</b>	<b>0.1855</b>	<b>4.9000e-004</b>	<b>0.1859</b>	<b>0.0495</b>	<b>4.5000e-004</b>	<b>0.0499</b>		<b>136.4834</b>	<b>136.4834</b>	<b>1.6400e-003</b>	<b>2.6300e-003</b>	<b>137.3085</b>



Construction Phase 3 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.6 Architectural Coating - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	92.9521					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.7081
<b>Total</b>	<b>93.0700</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>		<b>281.7081</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0700e-003	3.7400e-003	0.0704	2.7000e-004	0.0447	1.1000e-004	0.0448	0.0119	1.0000e-004	0.0120		30.3297	30.3297	3.6000e-004	5.8000e-004	30.5130
<b>Total</b>	<b>7.0700e-003</b>	<b>3.7400e-003</b>	<b>0.0704</b>	<b>2.7000e-004</b>	<b>0.0447</b>	<b>1.1000e-004</b>	<b>0.0448</b>	<b>0.0119</b>	<b>1.0000e-004</b>	<b>0.0120</b>		<b>30.3297</b>	<b>30.3297</b>	<b>3.6000e-004</b>	<b>5.8000e-004</b>	<b>30.5130</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 3 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day								lb/day						
Archit. Coating	92.9521					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104	281.7081
<b>Total</b>	<b>93.0700</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>	<b>281.7081</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0700e-003	3.7400e-003	0.0704	2.7000e-004	0.0412	1.1000e-004	0.0413	0.0110	1.0000e-004	0.0111		30.3297	30.3297	3.6000e-004	5.8000e-004	30.5130
<b>Total</b>	<b>7.0700e-003</b>	<b>3.7400e-003</b>	<b>0.0704</b>	<b>2.7000e-004</b>	<b>0.0412</b>	<b>1.1000e-004</b>	<b>0.0413</b>	<b>0.0110</b>	<b>1.0000e-004</b>	<b>0.0111</b>		<b>30.3297</b>	<b>30.3297</b>	<b>3.6000e-004</b>	<b>5.8000e-004</b>	<b>30.5130</b>

Construction Phase 3 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 3**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	50.14	1000sqft	0.30	50,136.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2040

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Based on information provided by the College District.  
 Construction Phase -  
 Trips and VMT - See Construction Phase 3 assumptions worksheet in the AQ/GHG appendix of the DEIR.  
 Construction Off-road Equipment Mitigation - Baesd on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	1.15	0.30
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

**Construction Phase 3 - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2038	0.2662	0.1748	0.4134	9.0000e-004	0.0204	2.6400e-003	0.0230	6.5800e-003	2.6300e-003	9.2200e-003	0.0000	78.9546	78.9546	2.7700e-003	1.0000e-003	79.3207
Maximum	0.2662	0.1748	0.4134	9.0000e-004	0.0204	2.6400e-003	0.0230	6.5800e-003	2.6300e-003	9.2200e-003	0.0000	78.9546	78.9546	2.7700e-003	1.0000e-003	79.3207

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2038	0.2662	0.1748	0.4134	9.0000e-004	0.0161	2.6400e-003	0.0187	4.8200e-003	2.6300e-003	7.4500e-003	0.0000	78.9545	78.9545	2.7700e-003	1.0000e-003	79.3206
Maximum	0.2662	0.1748	0.4134	9.0000e-004	0.0161	2.6400e-003	0.0187	4.8200e-003	2.6300e-003	7.4500e-003	0.0000	78.9545	78.9545	2.7700e-003	1.0000e-003	79.3206

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	21.17	0.00	18.74	26.75	0.00	19.20	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2038	4-30-2038	0.1032	0.1032
2	5-1-2038	7-31-2038	0.3376	0.3376
		Highest	0.3376	0.3376

**3.0 Construction Detail**

**Construction Phase**

Construction Phase 3 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/13/2038	2/15/2038	5	1	
2	Grading	Grading	2/16/2038	2/17/2038	5	2	
3	Building Construction	Building Construction	2/18/2038	7/7/2038	5	100	
4	Paving	Paving	7/8/2038	7/14/2038	5	5	
5	Architectural Coating	Architectural Coating	7/15/2038	7/21/2038	5	5	

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,204; Non-Residential Outdoor: 25,068; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Construction Phase 3 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Building Construction	5	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Site Preparation - 2038**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.9000e-004	1.9400e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
<b>Total</b>	<b>2.1000e-004</b>	<b>7.9000e-004</b>	<b>1.9400e-003</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>2.0000e-005</b>	<b>2.9000e-004</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.5117</b>	<b>0.5117</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5122</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0142	0.0142	0.0000	0.0000	0.0148
Worker	0.0000	0.0000	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0175	0.0175	0.0000	0.0000	0.0176
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0317</b>	<b>0.0317</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0325</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-004	0.0000	1.1000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.9000e-004	1.9400e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
<b>Total</b>	<b>2.1000e-004</b>	<b>7.9000e-004</b>	<b>1.9400e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>2.0000e-005</b>	<b>1.3000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5117</b>	<b>0.5117</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5122</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0142	0.0142	0.0000	0.0000	0.0148
Worker	0.0000	0.0000	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0175	0.0175	0.0000	0.0000	0.0176
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0317</b>	<b>0.0317</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0325</b>

Construction Phase 3 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Grading - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2000e-004	2.8700e-003	4.8500e-003	2.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.4822	1.4822	6.0000e-005	0.0000	1.4836
<b>Total</b>	<b>7.2000e-004</b>	<b>2.8700e-003</b>	<b>4.8500e-003</b>	<b>2.0000e-005</b>	<b>5.3100e-003</b>	<b>9.0000e-005</b>	<b>5.4000e-003</b>	<b>2.5700e-003</b>	<b>9.0000e-005</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.4836</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0568	0.0568	0.0000	1.0000e-005	0.0593
Worker	1.0000e-005	1.0000e-005	1.5000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0561	0.0561	0.0000	0.0000	0.0565
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1129</b>	<b>0.1129</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1158</b>

**Mitigated Construction On-Site**



Construction Phase 3 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	1.1000e-003	0.0000	1.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2000e-004	2.8700e-003	4.8500e-003	2.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.4822	1.4822	6.0000e-005	0.0000	1.4836
<b>Total</b>	<b>7.2000e-004</b>	<b>2.8700e-003</b>	<b>4.8500e-003</b>	<b>2.0000e-005</b>	<b>2.2700e-003</b>	<b>9.0000e-005</b>	<b>2.3600e-003</b>	<b>1.1000e-003</b>	<b>9.0000e-005</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.4836</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0568	0.0568	0.0000	1.0000e-005	0.0593
Worker	1.0000e-005	1.0000e-005	1.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0561	0.0561	0.0000	0.0000	0.0565
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1129</b>	<b>0.1129</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1158</b>

**3.4 Building Construction - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction Phase 3 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-Road	0.0288	0.1452	0.3573	7.0000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	60.0010	60.0010	2.3200e-003	0.0000	60.0589
<b>Total</b>	<b>0.0288</b>	<b>0.1452</b>	<b>0.3573</b>	<b>7.0000e-004</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>	<b>0.0000</b>	<b>60.0010</b>	<b>60.0010</b>	<b>2.3200e-003</b>	<b>0.0000</b>	<b>60.0589</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0142	5.4800e-003	6.0000e-005	2.5200e-003	1.0000e-004	2.6200e-003	7.3000e-004	9.0000e-005	8.2000e-004	0.0000	5.6782	5.6782	1.3000e-004	8.3000e-004	5.9298
Worker	1.7000e-003	1.0300e-003	0.0194	7.0000e-005	0.0115	3.0000e-005	0.0115	3.0600e-003	3.0000e-005	3.0800e-003	0.0000	7.3645	7.3645	9.0000e-005	1.4000e-004	7.4095
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0152</b>	<b>0.0249</b>	<b>1.3000e-004</b>	<b>0.0140</b>	<b>1.3000e-004</b>	<b>0.0142</b>	<b>3.7900e-003</b>	<b>1.2000e-004</b>	<b>3.9000e-003</b>	<b>0.0000</b>	<b>13.0427</b>	<b>13.0427</b>	<b>2.2000e-004</b>	<b>9.7000e-004</b>	<b>13.3392</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0288	0.1452	0.3573	7.0000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	60.0009	60.0009	2.3200e-003	0.0000	60.0588
<b>Total</b>	<b>0.0288</b>	<b>0.1452</b>	<b>0.3573</b>	<b>7.0000e-004</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>	<b>0.0000</b>	<b>60.0009</b>	<b>60.0009</b>	<b>2.3200e-003</b>	<b>0.0000</b>	<b>60.0588</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0142	5.4800e-003	6.0000e-005	2.3600e-003	1.0000e-004	2.4600e-003	6.9000e-004	9.0000e-005	7.8000e-004	0.0000	5.6782	5.6782	1.3000e-004	8.3000e-004	5.9298
Worker	1.7000e-003	1.0300e-003	0.0194	7.0000e-005	0.0106	3.0000e-005	0.0106	2.8400e-003	3.0000e-005	2.8600e-003	0.0000	7.3645	7.3645	9.0000e-005	1.4000e-004	7.4095
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0152</b>	<b>0.0249</b>	<b>1.3000e-004</b>	<b>0.0130</b>	<b>1.3000e-004</b>	<b>0.0131</b>	<b>3.5300e-003</b>	<b>1.2000e-004</b>	<b>3.6400e-003</b>	<b>0.0000</b>	<b>13.0427</b>	<b>13.0427</b>	<b>2.2000e-004</b>	<b>9.7000e-004</b>	<b>13.3392</b>

**3.5 Paving - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6100e-003	8.6800e-003	0.0187	3.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	2.7483	2.7483	1.3000e-004	0.0000	2.7515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.6100e-003</b>	<b>8.6800e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.7515</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	4.0000e-005	8.3000e-004	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3156	0.3156	0.0000	1.0000e-005	0.3176
<b>Total</b>	<b>7.0000e-005</b>	<b>4.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3156</b>	<b>0.3156</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.3176</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6100e-003	8.6800e-003	0.0187	3.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	2.7483	2.7483	1.3000e-004	0.0000	2.7515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.6100e-003</b>	<b>8.6800e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.7515</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	7.0000e-005	4.0000e-005	8.3000e-004	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3156	0.3156	0.0000	1.0000e-005	0.3176
<b>Total</b>	<b>7.0000e-005</b>	<b>4.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>4.6000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3156</b>	<b>0.3156</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.3176</b>

**3.6 Architectural Coating - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2324					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8900e-003	4.4900e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.2327</b>	<b>1.8900e-003</b>	<b>4.4900e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0701	0.0701	0.0000	0.0000	0.0706
<b>Total</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0701</b>	<b>0.0701</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0706</b>

Construction Phase 3 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2324					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8900e-003	4.4900e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.2327</b>	<b>1.8900e-003</b>	<b>4.4900e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0701	0.0701	0.0000	0.0000	0.0706
<b>Total</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0701</b>	<b>0.0701</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0706</b>

### Construction Phase 3

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### San Bernardino-South Coast County, Mitigation Report

### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	5	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	2.90000E-004	1.89000E-003	4.49000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38900E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Cranes	6.00000E-003	1.36800E-002	3.37600E-002	1.80000E-004	4.70000E-004	4.70000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.80000E-004	0.00000E+000	1.52402E+001
Forklifts	6.47000E-003	3.52000E-002	8.91700E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001

### Construction Phase 3

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Graders	3.30000E-004	7.60000E-004	1.92000E-003	1.00000E-005	3.00000E-005	3.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	5.10000E-004	1.87000E-003	6.99000E-003	1.00000E-005	9.00000E-005	9.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08707E+000
Rollers	3.00000E-004	1.94000E-003	4.26000E-003	1.00000E-005	4.00000E-005	4.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05280E-001
Rubber Tired Dozers	3.70000E-004	1.57000E-003	1.65000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	6.73780E-001	6.73780E-001	3.00000E-005	0.00000E+000	6.74520E-001
Tractors/Loaders/Backhoes	1.69100E-002	9.97100E-002	2.42750E-001	3.90000E-004	1.31000E-003	1.31000E-003	0.00000E+000	3.37966E+001	3.37966E+001	1.37000E-003	0.00000E+000	3.38308E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mT/yr					
Air Compressors	2.90000E-004	1.89000E-003	4.49000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38900E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Cranes	6.00000E-003	1.36800E-002	3.37600E-002	1.80000E-004	4.70000E-004	4.70000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.80000E-004	0.00000E+000	1.52402E+001
Forklifts	6.47000E-003	3.52000E-002	8.91700E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Graders	3.30000E-004	7.60000E-004	1.92000E-003	1.00000E-005	3.00000E-005	3.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	5.10000E-004	1.87000E-003	6.99000E-003	1.00000E-005	9.00000E-005	9.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08707E+000
Rollers	3.00000E-004	1.94000E-003	4.26000E-003	1.00000E-005	4.00000E-005	4.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05280E-001
Rubber Tired Dozers	3.70000E-004	1.57000E-003	1.65000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	6.73770E-001	6.73770E-001	3.00000E-005	0.00000E+000	6.74520E-001
Tractors/Loaders/Backhoes	1.69100E-002	9.97100E-002	2.42750E-001	3.90000E-004	1.31000E-003	1.31000E-003	0.00000E+000	3.37966E+001	3.37966E+001	1.37000E-003	0.00000E+000	3.38307E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Percent Reduction											
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31336E-006	1.31336E-006	0.00000E+000	0.00000E+000	1.31232E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64760E-006	1.64760E-006	0.00000E+000	0.00000E+000	8.22931E-007
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.48416E-005	1.48416E-005	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18355E-006	1.18355E-006	0.00000E+000	0.00000E+000	1.18236E-006



### Construction Phase 3

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input		
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00	
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day) 2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00	
Yes	Clean Paved Road	% PM Reduction	9.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.09	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.01	0.00	0.01	0.00	0.08	0.07
Grading	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.17	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.59	0.67
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

# CalEEMod Output: Phase 3 Construction – Mitigated

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Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 3 - Mitigated**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	50.14	1000sqft	0.30	50,136.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2040

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Based on information provided by the College District.  
 Construction Phase -  
 Trips and VMT - See Construction Phase 3 assumptions worksheet in the AQ/GHG appendix of the DEIR.  
 Architectural Coating - Mitigation  
 Construction Off-road Equipment Mitigation - Baesd on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	1.15	0.30
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

**2.0 Emissions Summary**

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

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**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	18.7155	3.4862	7.8578	0.0184	5.4270	0.1072	5.5156	2.5996	0.1071	2.6882	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324
Maximum	18.7155	3.4862	7.8578	0.0184	5.4270	0.1072	5.5156	2.5996	0.1071	2.6882	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	18.7155	3.4862	7.8578	0.0184	2.3773	0.1072	2.4659	1.1270	0.1071	1.2156	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324
Maximum	18.7155	3.4862	7.8578	0.0184	2.3773	0.1072	2.4659	1.1270	0.1071	1.2156	0.0000	1,763.2413	1,763.2413	0.0648	0.0213	1,767.9324

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.20	0.00	55.29	56.65	0.00	54.78	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2038	2/1/2038	5	1	
2	Grading	Grading	2/2/2038	2/3/2038	5	2	
3	Building Construction	Building Construction	2/4/2038	6/23/2038	5	100	
4	Paving	Paving	6/24/2038	6/30/2038	5	5	
5	Architectural Coating	Architectural Coating	7/1/2038	7/7/2038	5	5	

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,204; Non-Residential Outdoor: 25,068; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Site Preparation - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343		1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0343</b>	<b>0.5646</b>	<b>0.0573</b>	<b>0.0343</b>	<b>0.0916</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	2.0700e-003	0.0673	0.0270	2.9000e-004	0.0128	4.9000e-004	0.0133	3.6900e-003	4.6000e-004	4.1500e-003		31.2614	31.2614	7.3000e-004	4.5800e-003	32.6457
Worker	8.9500e-003	4.4700e-003	0.1063	3.8000e-004	0.0559	1.4000e-004	0.0560	0.0148	1.2000e-004	0.0150		41.8087	41.8087	4.4000e-004	7.1000e-004	42.0314
<b>Total</b>	<b>0.0110</b>	<b>0.0718</b>	<b>0.1332</b>	<b>6.7000e-004</b>	<b>0.0687</b>	<b>6.3000e-004</b>	<b>0.0693</b>	<b>0.0185</b>	<b>5.8000e-004</b>	<b>0.0191</b>		<b>73.0702</b>	<b>73.0702</b>	<b>1.1700e-003</b>	<b>5.2900e-003</b>	<b>74.6771</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343	0.0000	1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0343</b>	<b>0.2610</b>	<b>0.0245</b>	<b>0.0343</b>	<b>0.0588</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0700e-003	0.0673	0.0270	2.9000e-004	0.0120	4.9000e-004	0.0125	3.4900e-003	4.6000e-004	3.9500e-003		31.2614	31.2614	7.3000e-004	4.5800e-003	32.6457
Worker	8.9500e-003	4.4700e-003	0.1063	3.8000e-004	0.0515	1.4000e-004	0.0517	0.0138	1.2000e-004	0.0139		41.8087	41.8087	4.4000e-004	7.1000e-004	42.0314
<b>Total</b>	<b>0.0110</b>	<b>0.0718</b>	<b>0.1332</b>	<b>6.7000e-004</b>	<b>0.0635</b>	<b>6.3000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.8000e-004</b>	<b>0.0178</b>		<b>73.0702</b>	<b>73.0702</b>	<b>1.1700e-003</b>	<b>5.2900e-003</b>	<b>74.6771</b>



Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Grading - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874		1,633.8245	1,633.8245	0.0627		1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>5.3119</b>	<b>0.0874</b>	<b>5.3994</b>	<b>2.5686</b>	<b>0.0874</b>	<b>2.6560</b>		<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>		<b>1,635.3908</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1346	0.0540	5.8000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.3000e-004	8.3100e-003		62.5229	62.5229	1.4600e-003	9.1700e-003	65.2914
Worker	0.0143	7.1500e-003	0.1700	6.0000e-004	0.0894	2.2000e-004	0.0896	0.0237	2.0000e-004	0.0239		66.8940	66.8940	7.1000e-004	1.1400e-003	67.2502
<b>Total</b>	<b>0.0185</b>	<b>0.1417</b>	<b>0.2240</b>	<b>1.1800e-003</b>	<b>0.1150</b>	<b>1.1900e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.1300e-003</b>	<b>0.0322</b>		<b>129.4168</b>	<b>129.4168</b>	<b>2.1700e-003</b>	<b>0.0103</b>	<b>132.5417</b>

**Mitigated Construction On-Site**

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874	0.0000	1,633.8245	1,633.8245	0.0627		1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0874</b>	<b>2.3583</b>	<b>1.0981</b>	<b>0.0874</b>	<b>1.1855</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>		<b>1,635.3908</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1346	0.0540	5.8000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.3000e-004	7.9000e-003		62.5229	62.5229	1.4600e-003	9.1700e-003	65.2914
Worker	0.0143	7.1500e-003	0.1700	6.0000e-004	0.0824	2.2000e-004	0.0826	0.0220	2.0000e-004	0.0222		66.8940	66.8940	7.1000e-004	1.1400e-003	67.2502
<b>Total</b>	<b>0.0185</b>	<b>0.1417</b>	<b>0.2240</b>	<b>1.1800e-003</b>	<b>0.1064</b>	<b>1.1900e-003</b>	<b>0.1076</b>	<b>0.0290</b>	<b>1.1300e-003</b>	<b>0.0301</b>		<b>129.4168</b>	<b>129.4168</b>	<b>2.1700e-003</b>	<b>0.0103</b>	<b>132.5417</b>

**3.4 Building Construction - 2038**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423		1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2600e-003	0.2692	0.1079	1.1700e-003	0.0513	1.9400e-003	0.0532	0.0148	1.8600e-003	0.0166		125.0458	125.0458	2.9200e-003	0.0183	130.5828
Worker	0.0376	0.0188	0.4463	1.5800e-003	0.2347	5.7000e-004	0.2353	0.0623	5.2000e-004	0.0628		175.5966	175.5966	1.8700e-003	2.9800e-003	176.5319
<b>Total</b>	<b>0.0458</b>	<b>0.2880</b>	<b>0.5542</b>	<b>2.7500e-003</b>	<b>0.2860</b>	<b>2.5100e-003</b>	<b>0.2885</b>	<b>0.0770</b>	<b>2.3800e-003</b>	<b>0.0794</b>		<b>300.6424</b>	<b>300.6424</b>	<b>4.7900e-003</b>	<b>0.0213</b>	<b>307.1147</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423	0.0000	1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2600e-003	0.2692	0.1079	1.1700e-003	0.0480	1.9400e-003	0.0499	0.0140	1.8600e-003	0.0158		125.0458	125.0458	2.9200e-003	0.0183	130.5828
Worker	0.0376	0.0188	0.4463	1.5800e-003	0.2164	5.7000e-004	0.2169	0.0577	5.2000e-004	0.0583		175.5966	175.5966	1.8700e-003	2.9800e-003	176.5319
<b>Total</b>	<b>0.0458</b>	<b>0.2880</b>	<b>0.5542</b>	<b>2.7500e-003</b>	<b>0.2643</b>	<b>2.5100e-003</b>	<b>0.2668</b>	<b>0.0717</b>	<b>2.3800e-003</b>	<b>0.0741</b>		<b>300.6424</b>	<b>300.6424</b>	<b>4.7900e-003</b>	<b>0.0213</b>	<b>307.1147</b>

**3.5 Paving - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067		1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0322	0.0161	0.3826	1.3500e-003	0.2012	4.9000e-004	0.2017	0.0534	4.5000e-004	0.0538	150.5114	150.5114	1.6000e-003	2.5600e-003	151.3130	
<b>Total</b>	<b>0.0322</b>	<b>0.0161</b>	<b>0.3826</b>	<b>1.3500e-003</b>	<b>0.2012</b>	<b>4.9000e-004</b>	<b>0.2017</b>	<b>0.0534</b>	<b>4.5000e-004</b>	<b>0.0538</b>	<b>150.5114</b>	<b>150.5114</b>	<b>1.6000e-003</b>	<b>2.5600e-003</b>	<b>151.3130</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067	0.0000	1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0322	0.0161	0.3826	1.3500e-003	0.1855	4.9000e-004	0.1859	0.0495	4.5000e-004	0.0499		150.5114	150.5114	1.6000e-003	2.5600e-003	151.3130
<b>Total</b>	<b>0.0322</b>	<b>0.0161</b>	<b>0.3826</b>	<b>1.3500e-003</b>	<b>0.1855</b>	<b>4.9000e-004</b>	<b>0.1859</b>	<b>0.0495</b>	<b>4.5000e-004</b>	<b>0.0499</b>		<b>150.5114</b>	<b>150.5114</b>	<b>1.6000e-003</b>	<b>2.5600e-003</b>	<b>151.3130</b>

**3.6 Architectural Coating - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.5904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.7081
<b>Total</b>	<b>18.7083</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>		<b>281.7081</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1600e-003	3.5800e-003	0.0850	3.0000e-004	0.0447	1.1000e-004	0.0448	0.0119	1.0000e-004	0.0120		33.4470	33.4470	3.6000e-004	5.7000e-004	33.6251
<b>Total</b>	<b>7.1600e-003</b>	<b>3.5800e-003</b>	<b>0.0850</b>	<b>3.0000e-004</b>	<b>0.0447</b>	<b>1.1000e-004</b>	<b>0.0448</b>	<b>0.0119</b>	<b>1.0000e-004</b>	<b>0.0120</b>		<b>33.4470</b>	<b>33.4470</b>	<b>3.6000e-004</b>	<b>5.7000e-004</b>	<b>33.6251</b>

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.5904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.7081
<b>Total</b>	<b>18.7083</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>		<b>281.7081</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1600e-003	3.5800e-003	0.0850	3.0000e-004	0.0412	1.1000e-004	0.0413	0.0110	1.0000e-004	0.0111		33.4470	33.4470	3.6000e-004	5.7000e-004	33.6251
<b>Total</b>	<b>7.1600e-003</b>	<b>3.5800e-003</b>	<b>0.0850</b>	<b>3.0000e-004</b>	<b>0.0412</b>	<b>1.1000e-004</b>	<b>0.0413</b>	<b>0.0110</b>	<b>1.0000e-004</b>	<b>0.0111</b>		<b>33.4470</b>	<b>33.4470</b>	<b>3.6000e-004</b>	<b>5.7000e-004</b>	<b>33.6251</b>

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 3 - Mitigated**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	50.14	1000sqft	0.30	50,136.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2040

**Utility Company**

<b>CO2 Intensity (lb/MWahr)</b>	0	<b>CH4 Intensity (lb/MWahr)</b>	0	<b>N2O Intensity (lb/MWahr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Construction Phase -
- Trips and VMT - See Construction Phase 3 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Baesd on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	1.15	0.30
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

**2.0 Emissions Summary**



Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	18.7154	3.4870	7.7919	0.0184	5.4270	0.1072	5.5156	2.5996	0.1071	2.6882	0.0000	1,757.1698	1,757.1698	0.0648	0.0215	1,761.8796
<b>Maximum</b>	<b>18.7154</b>	<b>3.4870</b>	<b>7.7919</b>	<b>0.0184</b>	<b>5.4270</b>	<b>0.1072</b>	<b>5.5156</b>	<b>2.5996</b>	<b>0.1071</b>	<b>2.6882</b>	<b>0.0000</b>	<b>1,757.1698</b>	<b>1,757.1698</b>	<b>0.0648</b>	<b>0.0215</b>	<b>1,761.8796</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	18.7154	3.4870	7.7919	0.0184	2.3773	0.1072	2.4659	1.1270	0.1071	1.2156	0.0000	1,757.1698	1,757.1698	0.0648	0.0215	1,761.8796
<b>Maximum</b>	<b>18.7154</b>	<b>3.4870</b>	<b>7.7919</b>	<b>0.0184</b>	<b>2.3773</b>	<b>0.1072</b>	<b>2.4659</b>	<b>1.1270</b>	<b>0.1071</b>	<b>1.2156</b>	<b>0.0000</b>	<b>1,757.1698</b>	<b>1,757.1698</b>	<b>0.0648</b>	<b>0.0215</b>	<b>1,761.8796</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>56.20</b>	<b>0.00</b>	<b>55.29</b>	<b>56.65</b>	<b>0.00</b>	<b>54.78</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2038	2/1/2038	5	1	
2	Grading	Grading	2/2/2038	2/3/2038	5	2	
3	Building Construction	Building Construction	2/4/2038	6/23/2038	5	100	
4	Paving	Paving	6/24/2038	6/30/2038	5	5	
5	Architectural Coating	Architectural Coating	7/1/2038	7/7/2038	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,204; Non-Residential Outdoor: 25,068; Striped Parking Area: 0 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Site Preparation - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343		1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0343</b>	<b>0.5646</b>	<b>0.0573</b>	<b>0.0343</b>	<b>0.0916</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	1.9000e-003	0.0711	0.0278	2.9000e-004	0.0128	4.9000e-004	0.0133	3.6900e-003	4.7000e-004	4.1500e-003		31.3430	31.3430	7.2000e-004	4.6000e-003	32.7314
Worker	8.8300e-003	4.6800e-003	0.0880	3.4000e-004	0.0559	1.4000e-004	0.0560	0.0148	1.2000e-004	0.0150		37.9121	37.9121	4.6000e-004	7.3000e-004	38.1413
<b>Total</b>	<b>0.0107</b>	<b>0.0758</b>	<b>0.1158</b>	<b>6.3000e-004</b>	<b>0.0687</b>	<b>6.3000e-004</b>	<b>0.0693</b>	<b>0.0185</b>	<b>5.9000e-004</b>	<b>0.0191</b>		<b>69.2551</b>	<b>69.2551</b>	<b>1.1800e-003</b>	<b>5.3300e-003</b>	<b>70.8727</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4284	1.5740	3.8815	0.0119		0.0343	0.0343		0.0343	0.0343	0.0000	1,128.1977	1,128.1977	0.0376		1,129.1364
<b>Total</b>	<b>0.4284</b>	<b>1.5740</b>	<b>3.8815</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0343</b>	<b>0.2610</b>	<b>0.0245</b>	<b>0.0343</b>	<b>0.0588</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0376</b>		<b>1,129.1364</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-003	0.0711	0.0278	2.9000e-004	0.0120	4.9000e-004	0.0125	3.4900e-003	4.7000e-004	3.9500e-003		31.3430	31.3430	7.2000e-004	4.6000e-003	32.7314
Worker	8.8300e-003	4.6800e-003	0.0880	3.4000e-004	0.0515	1.4000e-004	0.0517	0.0138	1.2000e-004	0.0139		37.9121	37.9121	4.6000e-004	7.3000e-004	38.1413
<b>Total</b>	<b>0.0107</b>	<b>0.0758</b>	<b>0.1158</b>	<b>6.3000e-004</b>	<b>0.0635</b>	<b>6.3000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.9000e-004</b>	<b>0.0178</b>		<b>69.2551</b>	<b>69.2551</b>	<b>1.1800e-003</b>	<b>5.3300e-003</b>	<b>70.8727</b>

**Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Grading - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874		1,633.8245	1,633.8245	0.0627		1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>5.3119</b>	<b>0.0874</b>	<b>5.3994</b>	<b>2.5686</b>	<b>0.0874</b>	<b>2.6560</b>		<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>		<b>1,635.3908</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7900e-003	0.1423	0.0557	5.9000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.3000e-004	8.3100e-003		62.6861	62.6861	1.4400e-003	9.2000e-003	65.4628
Worker	0.0141	7.4900e-003	0.1408	5.5000e-004	0.0894	2.2000e-004	0.0896	0.0237	2.0000e-004	0.0239		60.6593	60.6593	7.3000e-004	1.1700e-003	61.0260
<b>Total</b>	<b>0.0179</b>	<b>0.1498</b>	<b>0.1964</b>	<b>1.1400e-003</b>	<b>0.1150</b>	<b>1.1900e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.1300e-003</b>	<b>0.0322</b>		<b>123.3454</b>	<b>123.3454</b>	<b>2.1700e-003</b>	<b>0.0104</b>	<b>126.4888</b>

**Mitigated Construction On-Site**

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	0.7155	2.8730	4.8534	0.0173		0.0874	0.0874		0.0874	0.0874	0.0000	1,633.8245	1,633.8245	0.0627		1,635.3908
<b>Total</b>	<b>0.7155</b>	<b>2.8730</b>	<b>4.8534</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0874</b>	<b>2.3583</b>	<b>1.0981</b>	<b>0.0874</b>	<b>1.1855</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0627</b>		<b>1,635.3908</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7900e-003	0.1423	0.0557	5.9000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.3000e-004	7.9100e-003		62.6861	62.6861	1.4400e-003	9.2000e-003	65.4628
Worker	0.0141	7.4900e-003	0.1408	5.5000e-004	0.0824	2.2000e-004	0.0826	0.0220	2.0000e-004	0.0222		60.6593	60.6593	7.3000e-004	1.1700e-003	61.0260
<b>Total</b>	<b>0.0179</b>	<b>0.1498</b>	<b>0.1964</b>	<b>1.1400e-003</b>	<b>0.1064</b>	<b>1.1900e-003</b>	<b>0.1076</b>	<b>0.0290</b>	<b>1.1300e-003</b>	<b>0.0301</b>		<b>123.3454</b>	<b>123.3454</b>	<b>2.1700e-003</b>	<b>0.0104</b>	<b>126.4888</b>

**3.4 Building Construction - 2038**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423		1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5800e-003	0.2846	0.1113	1.1700e-003	0.0513	1.9500e-003	0.0532	0.0148	1.8600e-003	0.0166		125.3721	125.3721	2.8900e-003	0.0184	130.9257
Worker	0.0371	0.0197	0.3695	1.4300e-003	0.2347	5.7000e-004	0.2353	0.0623	5.2000e-004	0.0628		159.2307	159.2307	1.9100e-003	3.0700e-003	160.1933
<b>Total</b>	<b>0.0447</b>	<b>0.3042</b>	<b>0.4808</b>	<b>2.6000e-003</b>	<b>0.2860</b>	<b>2.5200e-003</b>	<b>0.2885</b>	<b>0.0770</b>	<b>2.3800e-003</b>	<b>0.0794</b>		<b>284.6028</b>	<b>284.6028</b>	<b>4.8000e-003</b>	<b>0.0215</b>	<b>291.1189</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5761	2.9031	7.1465	0.0140		0.0423	0.0423		0.0423	0.0423	0.0000	1,322.7958	1,322.7958	0.0511		1,324.0721
<b>Total</b>	<b>0.5761</b>	<b>2.9031</b>	<b>7.1465</b>	<b>0.0140</b>		<b>0.0423</b>	<b>0.0423</b>		<b>0.0423</b>	<b>0.0423</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0511</b>		<b>1,324.0721</b>

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5800e-003	0.2846	0.1113	1.1700e-003	0.0480	1.9500e-003	0.0499	0.0140	1.8600e-003	0.0158		125.3721	125.3721	2.8900e-003	0.0184	130.9257
Worker	0.0371	0.0197	0.3695	1.4300e-003	0.2164	5.7000e-004	0.2169	0.0577	5.2000e-004	0.0583		159.2307	159.2307	1.9100e-003	3.0700e-003	160.1933
<b>Total</b>	<b>0.0447</b>	<b>0.3042</b>	<b>0.4808</b>	<b>2.6000e-003</b>	<b>0.2643</b>	<b>2.5200e-003</b>	<b>0.2668</b>	<b>0.0717</b>	<b>2.3800e-003</b>	<b>0.0741</b>		<b>284.6028</b>	<b>284.6028</b>	<b>4.8000e-003</b>	<b>0.0215</b>	<b>291.1189</b>

**3.5 Paving - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067		1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0318	0.0169	0.3167	1.2300e-003	0.2012	4.9000e-004	0.2017	0.0534	4.5000e-004	0.0538	136.4834	136.4834	1.6400e-003	2.6300e-003	137.3085	
<b>Total</b>	<b>0.0318</b>	<b>0.0169</b>	<b>0.3167</b>	<b>1.2300e-003</b>	<b>0.2012</b>	<b>4.9000e-004</b>	<b>0.2017</b>	<b>0.0534</b>	<b>4.5000e-004</b>	<b>0.0538</b>		<b>136.4834</b>	<b>136.4834</b>	<b>1.6400e-003</b>	<b>2.6300e-003</b>	<b>137.3085</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6458	3.4702	7.4752	0.0133		0.1067	0.1067		0.1067	0.1067	0.0000	1,211.7777	1,211.7777	0.0578		1,213.2227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6458</b>	<b>3.4702</b>	<b>7.4752</b>	<b>0.0133</b>		<b>0.1067</b>	<b>0.1067</b>		<b>0.1067</b>	<b>0.1067</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0578</b>		<b>1,213.2227</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0318	0.0169	0.3167	1.2300e-003	0.1855	4.9000e-004	0.1859	0.0495	4.5000e-004	0.0499		136.4834	136.4834	1.6400e-003	2.6300e-003	137.3085
<b>Total</b>	<b>0.0318</b>	<b>0.0169</b>	<b>0.3167</b>	<b>1.2300e-003</b>	<b>0.1855</b>	<b>4.9000e-004</b>	<b>0.1859</b>	<b>0.0495</b>	<b>4.5000e-004</b>	<b>0.0499</b>		<b>136.4834</b>	<b>136.4834</b>	<b>1.6400e-003</b>	<b>2.6300e-003</b>	<b>137.3085</b>

**3.6 Architectural Coating - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.5904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.7081
<b>Total</b>	<b>18.7083</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>		<b>281.7081</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0700e-003	3.7400e-003	0.0704	2.7000e-004	0.0447	1.1000e-004	0.0448	0.0119	1.0000e-004	0.0120		30.3297	30.3297	3.6000e-004	5.8000e-004	30.5130
<b>Total</b>	<b>7.0700e-003</b>	<b>3.7400e-003</b>	<b>0.0704</b>	<b>2.7000e-004</b>	<b>0.0447</b>	<b>1.1000e-004</b>	<b>0.0448</b>	<b>0.0119</b>	<b>1.0000e-004</b>	<b>0.0120</b>		<b>30.3297</b>	<b>30.3297</b>	<b>3.6000e-004</b>	<b>5.8000e-004</b>	<b>30.5130</b>

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.5904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.7081
<b>Total</b>	<b>18.7083</b>	<b>0.7577</b>	<b>1.7943</b>	<b>2.9700e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0104</b>		<b>281.7081</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0700e-003	3.7400e-003	0.0704	2.7000e-004	0.0412	1.1000e-004	0.0413	0.0110	1.0000e-004	0.0111		30.3297	30.3297	3.6000e-004	5.8000e-004	30.5130
<b>Total</b>	<b>7.0700e-003</b>	<b>3.7400e-003</b>	<b>0.0704</b>	<b>2.7000e-004</b>	<b>0.0412</b>	<b>1.1000e-004</b>	<b>0.0413</b>	<b>0.0110</b>	<b>1.0000e-004</b>	<b>0.0111</b>		<b>30.3297</b>	<b>30.3297</b>	<b>3.6000e-004</b>	<b>5.8000e-004</b>	<b>30.5130</b>

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 3 - Mitigated**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	50.14	1000sqft	0.30	50,136.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2040

**Utility Company**

<b>CO2 Intensity (lb/MWahr)</b>	0	<b>CH4 Intensity (lb/MWahr)</b>	0	<b>N2O Intensity (lb/MWahr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Construction Phase -
- Trips and VMT - See Construction Phase 3 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Baesd on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	1.15	0.30
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

**2.0 Emissions Summary**

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.1 Overall Construction**  
**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2038	0.0803	0.1748	0.4134	9.0000e-004	0.0204	2.6400e-003	0.0230	6.5800e-003	2.6300e-003	9.2200e-003	0.0000	78.9546	78.9546	2.7700e-003	1.0000e-003	79.3207
<b>Maximum</b>	<b>0.0803</b>	<b>0.1748</b>	<b>0.4134</b>	<b>9.0000e-004</b>	<b>0.0204</b>	<b>2.6400e-003</b>	<b>0.0230</b>	<b>6.5800e-003</b>	<b>2.6300e-003</b>	<b>9.2200e-003</b>	<b>0.0000</b>	<b>78.9546</b>	<b>78.9546</b>	<b>2.7700e-003</b>	<b>1.0000e-003</b>	<b>79.3207</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2038	0.0803	0.1748	0.4134	9.0000e-004	0.0161	2.6400e-003	0.0187	4.8200e-003	2.6300e-003	7.4500e-003	0.0000	78.9545	78.9545	2.7700e-003	1.0000e-003	79.3206
<b>Maximum</b>	<b>0.0803</b>	<b>0.1748</b>	<b>0.4134</b>	<b>9.0000e-004</b>	<b>0.0161</b>	<b>2.6400e-003</b>	<b>0.0187</b>	<b>4.8200e-003</b>	<b>2.6300e-003</b>	<b>7.4500e-003</b>	<b>0.0000</b>	<b>78.9545</b>	<b>78.9545</b>	<b>2.7700e-003</b>	<b>1.0000e-003</b>	<b>79.3206</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>21.17</b>	<b>0.00</b>	<b>18.74</b>	<b>26.75</b>	<b>0.00</b>	<b>19.20</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2038	4-30-2038	0.1208	0.1208
2	5-1-2038	7-31-2038	0.1326	0.1326
		<b>Highest</b>	<b>0.1326</b>	<b>0.1326</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2038	2/1/2038	5	1	
2	Grading	Grading	2/2/2038	2/3/2038	5	2	
3	Building Construction	Building Construction	2/4/2038	6/23/2038	5	100	
4	Paving	Paving	6/24/2038	6/30/2038	5	5	
5	Architectural Coating	Architectural Coating	7/1/2038	7/7/2038	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,204; Non-Residential Outdoor: 25,068; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.9000e-004	1.9400e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
Total	2.1000e-004	7.9000e-004	1.9400e-003	1.0000e-005	2.7000e-004	2.0000e-005	2.9000e-004	3.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0142	0.0142	0.0000	0.0000	0.0148
Worker	0.0000	0.0000	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0175	0.0175	0.0000	0.0000	0.0176
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0317</b>	<b>0.0317</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0325</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-004	0.0000	1.1000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.9000e-004	1.9400e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
<b>Total</b>	<b>2.1000e-004</b>	<b>7.9000e-004</b>	<b>1.9400e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>2.0000e-005</b>	<b>1.3000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5117</b>	<b>0.5117</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5122</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0142	0.0142	0.0000	0.0000	0.0148



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0000	0.0000	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0175	0.0175	0.0000	0.0000	0.0176
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0317</b>	<b>0.0317</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0325</b>

**3.3 Grading - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2000e-004	2.8700e-003	4.8500e-003	2.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.4822	1.4822	6.0000e-005	0.0000	1.4836
<b>Total</b>	<b>7.2000e-004</b>	<b>2.8700e-003</b>	<b>4.8500e-003</b>	<b>2.0000e-005</b>	<b>5.3100e-003</b>	<b>9.0000e-005</b>	<b>5.4000e-003</b>	<b>2.5700e-003</b>	<b>9.0000e-005</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.4836</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0568	0.0568	0.0000	1.0000e-005	0.0593
Worker	1.0000e-005	1.0000e-005	1.5000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0561	0.0561	0.0000	0.0000	0.0565
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1129</b>	<b>0.1129</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1158</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	1.1000e-003	0.0000	1.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2000e-004	2.8700e-003	4.8500e-003	2.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.4822	1.4822	6.0000e-005	0.0000	1.4836
<b>Total</b>	<b>7.2000e-004</b>	<b>2.8700e-003</b>	<b>4.8500e-003</b>	<b>2.0000e-005</b>	<b>2.2700e-003</b>	<b>9.0000e-005</b>	<b>2.3600e-003</b>	<b>1.1000e-003</b>	<b>9.0000e-005</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.4836</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0568	0.0568	0.0000	1.0000e-005	0.0593
Worker	1.0000e-005	1.0000e-005	1.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0561	0.0561	0.0000	0.0000	0.0565
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1129</b>	<b>0.1129</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1158</b>

**3.4 Building Construction - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	tons/yr										MT/yr					
Off-Road	0.0288	0.1452	0.3573	7.0000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	60.0010	60.0010	2.3200e-003	0.0000	60.0589
<b>Total</b>	<b>0.0288</b>	<b>0.1452</b>	<b>0.3573</b>	<b>7.0000e-004</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>	<b>0.0000</b>	<b>60.0010</b>	<b>60.0010</b>	<b>2.3200e-003</b>	<b>0.0000</b>	<b>60.0589</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0142	5.4800e-003	6.0000e-005	2.5200e-003	1.0000e-004	2.6200e-003	7.3000e-004	9.0000e-005	8.2000e-004	0.0000	5.6782	5.6782	1.3000e-004	8.3000e-004	5.9298
Worker	1.7000e-003	1.0300e-003	0.0194	7.0000e-005	0.0115	3.0000e-005	0.0115	3.0600e-003	3.0000e-005	3.0800e-003	0.0000	7.3645	7.3645	9.0000e-005	1.4000e-004	7.4095
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0152</b>	<b>0.0249</b>	<b>1.3000e-004</b>	<b>0.0140</b>	<b>1.3000e-004</b>	<b>0.0142</b>	<b>3.7900e-003</b>	<b>1.2000e-004</b>	<b>3.9000e-003</b>	<b>0.0000</b>	<b>13.0427</b>	<b>13.0427</b>	<b>2.2000e-004</b>	<b>9.7000e-004</b>	<b>13.3392</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0288	0.1452	0.3573	7.0000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	60.0009	60.0009	2.3200e-003	0.0000	60.0588
<b>Total</b>	<b>0.0288</b>	<b>0.1452</b>	<b>0.3573</b>	<b>7.0000e-004</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>	<b>0.0000</b>	<b>60.0009</b>	<b>60.0009</b>	<b>2.3200e-003</b>	<b>0.0000</b>	<b>60.0588</b>

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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0142	5.4800e-003	6.0000e-005	2.3600e-003	1.0000e-004	2.4600e-003	6.9000e-004	9.0000e-005	7.8000e-004	0.0000	5.6782	5.6782	1.3000e-004	8.3000e-004	5.9298
Worker	1.7000e-003	1.0300e-003	0.0194	7.0000e-005	0.0106	3.0000e-005	0.0106	2.8400e-003	3.0000e-005	2.8600e-003	0.0000	7.3645	7.3645	9.0000e-005	1.4000e-004	7.4095
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0152</b>	<b>0.0249</b>	<b>1.3000e-004</b>	<b>0.0130</b>	<b>1.3000e-004</b>	<b>0.0131</b>	<b>3.5300e-003</b>	<b>1.2000e-004</b>	<b>3.6400e-003</b>	<b>0.0000</b>	<b>13.0427</b>	<b>13.0427</b>	<b>2.2000e-004</b>	<b>9.7000e-004</b>	<b>13.3392</b>

**3.5 Paving - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6100e-003	8.6800e-003	0.0187	3.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	2.7483	2.7483	1.3000e-004	0.0000	2.7515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.6100e-003</b>	<b>8.6800e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.7515</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	4.0000e-005	8.3000e-004	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3156	0.3156	0.0000	1.0000e-005	0.3176
<b>Total</b>	<b>7.0000e-005</b>	<b>4.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3156</b>	<b>0.3156</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.3176</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6100e-003	8.6800e-003	0.0187	3.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	2.7483	2.7483	1.3000e-004	0.0000	2.7515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.6100e-003</b>	<b>8.6800e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.7515</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	7.0000e-005	4.0000e-005	8.3000e-004	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3156	0.3156	0.0000	1.0000e-005	0.3176
<b>Total</b>	<b>7.0000e-005</b>	<b>4.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>4.6000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3156</b>	<b>0.3156</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.3176</b>

**3.6 Architectural Coating - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0465					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8900e-003	4.4900e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.0468</b>	<b>1.8900e-003</b>	<b>4.4900e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0701	0.0701	0.0000	0.0000	0.0706
<b>Total</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0701</b>	<b>0.0701</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0706</b>

Construction Phase 3 - Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0465					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8900e-003	4.4900e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.0468</b>	<b>1.8900e-003</b>	<b>4.4900e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0701	0.0701	0.0000	0.0000	0.0706
<b>Total</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0701</b>	<b>0.0701</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0706</b>

**Construction Phase 3 - Mitigated**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	5	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	2.90000E-004	1.89000E-003	4.49000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38900E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Cranes	6.00000E-003	1.36800E-002	3.37600E-002	1.80000E-004	4.70000E-004	4.70000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.80000E-004	0.00000E+000	1.52402E+001



### Construction Phase 3 - Mitigated

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Forklifts	6.47000E-003	3.52000E-002	8.91700E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Graders	3.30000E-004	7.60000E-004	1.92000E-003	1.00000E-005	3.00000E-005	3.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	5.10000E-004	1.87000E-003	6.99000E-003	1.00000E-005	9.00000E-005	9.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08707E+000
Rollers	3.00000E-004	1.94000E-003	4.26000E-003	1.00000E-005	4.00000E-005	4.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05280E-001
Rubber Tired Dozers	3.70000E-004	1.57000E-003	1.65000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	6.73780E-001	6.73780E-001	3.00000E-005	0.00000E+000	6.74520E-001
Tractors/Loaders/Bulldozers	1.69100E-002	9.97100E-002	2.42750E-001	3.90000E-004	1.31000E-003	1.31000E-003	0.00000E+000	3.37966E+001	3.37966E+001	1.37000E-003	0.00000E+000	3.38308E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr						Mitigated mt/yr						
Air Compressors	2.90000E-004	1.89000E-003	4.49000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38900E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Cranes	6.00000E-003	1.36800E-002	3.37600E-002	1.80000E-004	4.70000E-004	4.70000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.80000E-004	0.00000E+000	1.52402E+001
Forklifts	6.47000E-003	3.52000E-002	8.91700E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Graders	3.30000E-004	7.60000E-004	1.92000E-003	1.00000E-005	3.00000E-005	3.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	5.10000E-004	1.87000E-003	6.99000E-003	1.00000E-005	9.00000E-005	9.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08707E+000
Rollers	3.00000E-004	1.94000E-003	4.26000E-003	1.00000E-005	4.00000E-005	4.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05280E-001
Rubber Tired Dozers	3.70000E-004	1.57000E-003	1.65000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	6.73770E-001	6.73770E-001	3.00000E-005	0.00000E+000	6.74520E-001
Tractors/Loaders/Bulldozers	1.69100E-002	9.97100E-002	2.42750E-001	3.90000E-004	1.31000E-003	1.31000E-003	0.00000E+000	3.37966E+001	3.37966E+001	1.37000E-003	0.00000E+000	3.38307E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31336E-006	1.31336E-006	0.00000E+000	0.00000E+000	1.31232E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64760E-006	1.64760E-006	0.00000E+000	0.00000E+000	8.22931E-007
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.48416E-005	1.48416E-005	0.00000E+000	0.00000E+000	0.00000E+000

**Construction Phase 3 - Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Tractors/Loaders/Bac kboes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18355E-006	1.18355E-006	0.00000E+000	0.00000E+000	1.18236E-006
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**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00	
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day) 2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00	
Yes	Clean Paved Road	% PM Reduction	9.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.09	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.01	0.00	0.01	0.00	0.08	0.07
Grading	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.17	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.59	0.67
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

# CalEEMod Output: Phase 4 Construction

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Construction Phase 4 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 4**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	108.75	1000sqft	0.73	108,754.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2045

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Off-road Equipment -
- Off-road Equipment -
- Demolition -
- Trips and VMT - See Construction Phase 4 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	2.50	0.73
tblTripsAndVMT	HaulingTripNumber	131.00	132.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

Construction Phase 4 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	201.7575	4.5495	8.2886	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746
Maximum	201.7575	4.5495	8.2886	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	201.7575	4.5495	8.2886	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746
Maximum	201.7575	4.5495	8.2886	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.20	0.00	55.54	56.65	0.00	55.29	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/17/2042	7/23/2042	5	5	
2	Building Construction	Building Construction	2/20/2042	7/9/2042	5	100	
3	Demolition	Demolition	2/3/2042	2/14/2042	5	10	
4	Grading	Grading	2/18/2042	2/19/2042	5	2	
5	Paving	Paving	7/10/2042	7/16/2042	5	5	
6	Site Preparation	Site Preparation	2/15/2042	2/17/2042	5	1	

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 163,131; Non-Residential Outdoor: 54,377; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	46.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Architectural Coating - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	201.6299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>201.7448</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

**Unmitigated Construction Off-Site**



Construction Phase 4 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	7.0200e-003	0.1751	6.5000e-004	0.1006	1.9000e-004	0.1008	0.0267	1.8000e-004	0.0269		73.1793	73.1793	6.3000e-004	1.2100e-003	73.5566
<b>Total</b>	<b>0.0127</b>	<b>7.0200e-003</b>	<b>0.1751</b>	<b>6.5000e-004</b>	<b>0.1006</b>	<b>1.9000e-004</b>	<b>0.1008</b>	<b>0.0267</b>	<b>1.8000e-004</b>	<b>0.0269</b>		<b>73.1793</b>	<b>73.1793</b>	<b>6.3000e-004</b>	<b>1.2100e-003</b>	<b>73.5566</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	201.6299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>201.7448</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0127	7.0200e-003	0.1751	6.5000e-004	0.0927	1.9000e-004	0.0929	0.0248	1.8000e-004	0.0249		73.1793	73.1793	6.3000e-004	1.2100e-003	73.5566
<b>Total</b>	<b>0.0127</b>	<b>7.0200e-003</b>	<b>0.1751</b>	<b>6.5000e-004</b>	<b>0.0927</b>	<b>1.9000e-004</b>	<b>0.0929</b>	<b>0.0248</b>	<b>1.8000e-004</b>	<b>0.0249</b>		<b>73.1793</b>	<b>73.1793</b>	<b>6.3000e-004</b>	<b>1.2100e-003</b>	<b>73.5566</b>

**3.3 Building Construction - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355		1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0186	0.6013	0.2431	2.5300e-003	0.1153	4.3300e-003	0.1196	0.0332	4.1400e-003	0.0373		270.5183	270.5183	6.0900e-003	0.0396	282.4765
Worker	0.0650	0.0359	0.8952	3.3200e-003	0.5142	9.9000e-004	0.5152	0.1364	9.1000e-004	0.1373		374.0273	374.0273	3.2000e-003	6.2000e-003	375.9561
<b>Total</b>	<b>0.0836</b>	<b>0.6372</b>	<b>1.1382</b>	<b>5.8500e-003</b>	<b>0.6295</b>	<b>5.3200e-003</b>	<b>0.6348</b>	<b>0.1696</b>	<b>5.0500e-003</b>	<b>0.1746</b>		<b>644.5456</b>	<b>644.5456</b>	<b>9.2900e-003</b>	<b>0.0458</b>	<b>658.4326</b>

Construction Phase 4 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355	0.0000	1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0186	0.6013	0.2431	2.5300e-003	0.1079	4.3300e-003	0.1123	0.0314	4.1400e-003	0.0355		270.5183	270.5183	6.0900e-003	0.0396	282.4765
Worker	0.0650	0.0359	0.8952	3.3200e-003	0.4739	9.9000e-004	0.4749	0.1265	9.1000e-004	0.1274		374.0273	374.0273	3.2000e-003	6.2000e-003	375.9561
<b>Total</b>	<b>0.0836</b>	<b>0.6372</b>	<b>1.1382</b>	<b>5.8500e-003</b>	<b>0.5819</b>	<b>5.3200e-003</b>	<b>0.5872</b>	<b>0.1579</b>	<b>5.0500e-003</b>	<b>0.1629</b>		<b>644.5456</b>	<b>644.5456</b>	<b>9.2900e-003</b>	<b>0.0458</b>	<b>658.4326</b>

**3.4 Demolition - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day				
Fugitive Dust					2.8418	0.0000	2.8418	0.4303	0.0000	0.4303			0.0000		0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355		1,256.0421	1,256.0421	0.0434	1,257.1273
<b>Total</b>	<b>0.4996</b>	<b>3.0819</b>	<b>7.4089</b>	<b>0.0133</b>	<b>2.8418</b>	<b>0.0355</b>	<b>2.8773</b>	<b>0.4303</b>	<b>0.0355</b>	<b>0.4658</b>		<b>1,256.0421</b>	<b>1,256.0421</b>	<b>0.0434</b>	<b>1,257.1273</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0299	1.3261	0.4345	5.6000e-003	0.2311	0.0137	0.2448	0.0634	0.0131	0.0765		606.9530	606.9530	0.0228	0.0961	636.1451
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0256	9.6000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726
Worker	0.0141	7.8000e-003	0.1946	7.2000e-004	0.1118	2.1000e-004	0.1120	0.0296	2.0000e-004	0.0298		81.3103	81.3103	7.0000e-004	1.3500e-003	81.7296
<b>Total</b>	<b>0.0482</b>	<b>1.4676</b>	<b>0.6831</b>	<b>6.8800e-003</b>	<b>0.3685</b>	<b>0.0149</b>	<b>0.3834</b>	<b>0.1004</b>	<b>0.0142</b>	<b>0.1146</b>		<b>748.3784</b>	<b>748.3784</b>	<b>0.0248</b>	<b>0.1062</b>	<b>780.6472</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2149	0.0000	1.2149	0.1839	0.0000	0.1839			0.0000			0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355	0.0000	1,256.0421	1,256.0421	0.0434		1,257.1273

Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	0.4996	3.0819	7.4089	0.0133	1.2149	0.0355	1.2504	0.1839	0.0355	0.2194	0.0000	1,256.0421	1,256.0421	0.0434		1,257.1273
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0299	1.3261	0.4345	5.6000e-003	0.2154	0.0137	0.2291	0.0595	0.0131	0.0726		606.9530	606.9530	0.0228	0.0961	636.1451
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0240	9.6000e-004	0.0249	6.9800e-003	9.2000e-004	7.9000e-003		60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726
Worker	0.0141	7.8000e-003	0.1946	7.2000e-004	0.1030	2.1000e-004	0.1033	0.0275	2.0000e-004	0.0277		81.3103	81.3103	7.0000e-004	1.3500e-003	81.7296
<b>Total</b>	<b>0.0482</b>	<b>1.4676</b>	<b>0.6831</b>	<b>6.8800e-003</b>	<b>0.3424</b>	<b>0.0149</b>	<b>0.3573</b>	<b>0.0940</b>	<b>0.0142</b>	<b>0.1082</b>		<b>748.3784</b>	<b>748.3784</b>	<b>0.0248</b>	<b>0.1062</b>	<b>780.6472</b>

**3.5 Grading - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626		1,633.8245	1,633.8245	0.0582		1,635.2789
<b>Total</b>	<b>0.6620</b>	<b>2.2462</b>	<b>4.8010</b>	<b>0.0173</b>	<b>5.3119</b>	<b>0.0626</b>	<b>5.3745</b>	<b>2.5686</b>	<b>0.0626</b>	<b>2.6311</b>		<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0582</b>		<b>1,635.2789</b>

Construction Phase 4 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0256	9.6000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726
Worker	0.0113	6.2400e-003	0.1557	5.8000e-004	0.0894	1.7000e-004	0.0896	0.0237	1.6000e-004	0.0239		65.0482	65.0482	5.6000e-004	1.0800e-003	65.3837
<b>Total</b>	<b>0.0154</b>	<b>0.1399</b>	<b>0.2097</b>	<b>1.1400e-003</b>	<b>0.1150</b>	<b>1.1300e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.0800e-003</b>	<b>0.0322</b>		<b>125.1634</b>	<b>125.1634</b>	<b>1.9100e-003</b>	<b>9.8800e-003</b>	<b>128.1562</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626	0.0000	1,633.8245	1,633.8245	0.0582		1,635.2789
<b>Total</b>	<b>0.6620</b>	<b>2.2462</b>	<b>4.8010</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0626</b>	<b>2.3334</b>	<b>1.0981</b>	<b>0.0626</b>	<b>1.1606</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0582</b>		<b>1,635.2789</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0240	9.6000e-004	0.0249	6.9800e-003	9.2000e-004	7.9000e-003	60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726	
Worker	0.0113	6.2400e-003	0.1557	5.8000e-004	0.0824	1.7000e-004	0.0826	0.0220	1.6000e-004	0.0222	65.0482	65.0482	5.6000e-004	1.0800e-003	65.3837	
<b>Total</b>	<b>0.0154</b>	<b>0.1399</b>	<b>0.2097</b>	<b>1.1400e-003</b>	<b>0.1064</b>	<b>1.1300e-003</b>	<b>0.1075</b>	<b>0.0290</b>	<b>1.0800e-003</b>	<b>0.0301</b>	<b>125.1634</b>	<b>125.1634</b>	<b>1.9100e-003</b>	<b>9.8800e-003</b>	<b>128.1562</b>	

**3.6 Paving - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844		1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0254	0.0140	0.3503	1.3000e-003	0.2012	3.9000e-004	0.2016	0.0534	3.6000e-004	0.0537		146.3585	146.3585	1.2500e-003	2.4300e-003	147.1133
<b>Total</b>	<b>0.0254</b>	<b>0.0140</b>	<b>0.3503</b>	<b>1.3000e-003</b>	<b>0.2012</b>	<b>3.9000e-004</b>	<b>0.2016</b>	<b>0.0534</b>	<b>3.6000e-004</b>	<b>0.0537</b>		<b>146.3585</b>	<b>146.3585</b>	<b>1.2500e-003</b>	<b>2.4300e-003</b>	<b>147.1133</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844	0.0000	1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0140	0.3503	1.3000e-003	0.1855	3.9000e-004	0.1858	0.0495	3.6000e-004	0.0499		146.3585	146.3585	1.2500e-003	2.4300e-003	147.1133
<b>Total</b>	<b>0.0254</b>	<b>0.0140</b>	<b>0.3503</b>	<b>1.3000e-003</b>	<b>0.1855</b>	<b>3.9000e-004</b>	<b>0.1858</b>	<b>0.0495</b>	<b>3.6000e-004</b>	<b>0.0499</b>		<b>146.3585</b>	<b>146.3585</b>	<b>1.2500e-003</b>	<b>2.4300e-003</b>	<b>147.1133</b>



Construction Phase 4 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Site Preparation - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277		1,128.1977	1,128.1977	0.0369		1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0277</b>	<b>0.5580</b>	<b>0.0573</b>	<b>0.0277</b>	<b>0.0850</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>		<b>1,129.1206</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0700e-003	0.0668	0.0270	2.8000e-004	0.0128	4.8000e-004	0.0133	3.6900e-003	4.6000e-004	4.1500e-003		30.0576	30.0576	6.8000e-004	4.4000e-003	31.3863
Worker	7.0700e-003	3.9000e-003	0.0973	3.6000e-004	0.0559	1.1000e-004	0.0560	0.0148	1.0000e-004	0.0149		40.6551	40.6551	3.5000e-004	6.7000e-004	40.8648
<b>Total</b>	<b>9.1400e-003</b>	<b>0.0707</b>	<b>0.1243</b>	<b>6.4000e-004</b>	<b>0.0687</b>	<b>5.9000e-004</b>	<b>0.0693</b>	<b>0.0185</b>	<b>5.6000e-004</b>	<b>0.0191</b>		<b>70.7127</b>	<b>70.7127</b>	<b>1.0300e-003</b>	<b>5.0700e-003</b>	<b>72.2511</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day				
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000		0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277	0.0000	1,128.1977	1,128.1977	0.0369	1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0277</b>	<b>0.2544</b>	<b>0.0245</b>	<b>0.0277</b>	<b>0.0522</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>	<b>1,129.1206</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0700e-003	0.0668	0.0270	2.8000e-004	0.0120	4.8000e-004	0.0125	3.4900e-003	4.6000e-004	3.9500e-003		30.0576	30.0576	6.8000e-004	4.4000e-003	31.3863
Worker	7.0700e-003	3.9000e-003	0.0973	3.6000e-004	0.0515	1.1000e-004	0.0516	0.0138	1.0000e-004	0.0139		40.6551	40.6551	3.5000e-004	6.7000e-004	40.8648
<b>Total</b>	<b>9.1400e-003</b>	<b>0.0707</b>	<b>0.1243</b>	<b>6.4000e-004</b>	<b>0.0635</b>	<b>5.9000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.6000e-004</b>	<b>0.0178</b>		<b>70.7127</b>	<b>70.7127</b>	<b>1.0300e-003</b>	<b>5.0700e-003</b>	<b>72.2511</b>

Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction Phase 4**  
San Bernardino-South Coast County, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	108.75	1000sqft	0.73	108,754.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2045

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Off-road Equipment -
- Off-road Equipment -
- Demolition -
- Trips and VMT - See Construction Phase 4 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	2.50	0.73
tblTripsAndVMT	HaulingTripNumber	131.00	132.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	201.7576	4.6310	8.1423	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422
Maximum	201.7576	4.6310	8.1423	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	201.7576	4.6310	8.1423	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422
Maximum	201.7576	4.6310	8.1423	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.20	0.00	55.54	56.65	0.00	55.29	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

Construction Phase

Construction Phase 4 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/17/2042	7/23/2042	5	5	
2	Building Construction	Building Construction	2/20/2042	7/9/2042	5	100	
3	Demolition	Demolition	2/3/2042	2/14/2042	5	10	
4	Grading	Grading	2/18/2042	2/19/2042	5	2	
5	Paving	Paving	7/10/2042	7/16/2042	5	5	
6	Site Preparation	Site Preparation	2/15/2042	2/17/2042	5	1	

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 163,131; Non-Residential Outdoor: 54,377; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Construction Phase 4 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	46.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Architectural Coating - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	201.6299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>201.7448</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

**Unmitigated Construction Off-Site**

Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	7.3400e-003	0.1450	5.9000e-004	0.1006	1.9000e-004	0.1008	0.0267	1.8000e-004	0.0269		66.3564	66.3564	6.4000e-004	1.2500e-003	66.7448
<b>Total</b>	<b>0.0127</b>	<b>7.3400e-003</b>	<b>0.1450</b>	<b>5.9000e-004</b>	<b>0.1006</b>	<b>1.9000e-004</b>	<b>0.1008</b>	<b>0.0267</b>	<b>1.8000e-004</b>	<b>0.0269</b>		<b>66.3564</b>	<b>66.3564</b>	<b>6.4000e-004</b>	<b>1.2500e-003</b>	<b>66.7448</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	201.6299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>201.7448</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 4 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	7.3400e-003	0.1450	5.9000e-004	0.0927	1.9000e-004	0.0929	0.0248	1.8000e-004	0.0249		66.3564	66.3564	6.4000e-004	1.2500e-003	66.7448
<b>Total</b>	<b>0.0127</b>	<b>7.3400e-003</b>	<b>0.1450</b>	<b>5.9000e-004</b>	<b>0.0927</b>	<b>1.9000e-004</b>	<b>0.0929</b>	<b>0.0248</b>	<b>1.8000e-004</b>	<b>0.0249</b>		<b>66.3564</b>	<b>66.3564</b>	<b>6.4000e-004</b>	<b>1.2500e-003</b>	<b>66.7448</b>

**3.3 Building Construction - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355		1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0170	0.6360	0.2509	2.5400e-003	0.1153	4.3400e-003	0.1197	0.0332	4.1600e-003	0.0374		271.2390	271.2390	6.0100e-003	0.0398	283.2335
Worker	0.0651	0.0375	0.7410	3.0100e-003	0.5142	9.9000e-004	0.5152	0.1364	9.1000e-004	0.1373		339.1547	339.1547	3.3000e-003	6.3900e-003	341.1400
<b>Total</b>	<b>0.0822</b>	<b>0.6735</b>	<b>0.9919</b>	<b>5.5500e-003</b>	<b>0.6295</b>	<b>5.3300e-003</b>	<b>0.6348</b>	<b>0.1696</b>	<b>5.0700e-003</b>	<b>0.1746</b>		<b>610.3938</b>	<b>610.3938</b>	<b>9.3100e-003</b>	<b>0.0461</b>	<b>624.3736</b>



Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355	0.0000	1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0170	0.6360	0.2509	2.5400e-003	0.1079	4.3400e-003	0.1123	0.0314	4.1600e-003	0.0355		271.2390	271.2390	6.0100e-003	0.0398	283.2335
Worker	0.0651	0.0375	0.7410	3.0100e-003	0.4739	9.9000e-004	0.4749	0.1265	9.1000e-004	0.1274		339.1547	339.1547	3.3000e-003	6.3900e-003	341.1400
<b>Total</b>	<b>0.0822</b>	<b>0.6735</b>	<b>0.9919</b>	<b>5.5500e-003</b>	<b>0.5819</b>	<b>5.3300e-003</b>	<b>0.5872</b>	<b>0.1579</b>	<b>5.0700e-003</b>	<b>0.1629</b>		<b>610.3938</b>	<b>610.3938</b>	<b>9.3100e-003</b>	<b>0.0461</b>	<b>624.3736</b>

**3.4 Demolition - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day				
Fugitive Dust					2.8418	0.0000	2.8418	0.4303	0.0000	0.4303			0.0000		0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355		1,256.0421	1,256.0421	0.0434	1,257.1273
<b>Total</b>	<b>0.4996</b>	<b>3.0819</b>	<b>7.4089</b>	<b>0.0133</b>	<b>2.8418</b>	<b>0.0355</b>	<b>2.8773</b>	<b>0.4303</b>	<b>0.0355</b>	<b>0.4658</b>		<b>1,256.0421</b>	<b>1,256.0421</b>	<b>0.0434</b>	<b>1,257.1273</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0275	1.3996	0.4423	5.6100e-003	0.2311	0.0137	0.2448	0.0634	0.0131	0.0765		607.9757	607.9757	0.0227	0.0962	637.2132
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408
Worker	0.0142	8.1600e-003	0.1611	6.5000e-004	0.1118	2.1000e-004	0.1120	0.0296	2.0000e-004	0.0298		73.7293	73.7293	7.2000e-004	1.3900e-003	74.1609
<b>Total</b>	<b>0.0454</b>	<b>1.5491</b>	<b>0.6592</b>	<b>6.8200e-003</b>	<b>0.3685</b>	<b>0.0149</b>	<b>0.3834</b>	<b>0.1004</b>	<b>0.0142</b>	<b>0.1146</b>		<b>741.9803</b>	<b>741.9803</b>	<b>0.0247</b>	<b>0.1064</b>	<b>774.3148</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2149	0.0000	1.2149	0.1839	0.0000	0.1839			0.0000			0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355	0.0000	1,256.0421	1,256.0421	0.0434		1,257.1273

Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.4996	3.0819	7.4089	0.0133	1.2149	0.0355	1.2504	0.1839	0.0355	0.2194	0.0000	1,256.0421	1,256.0421	0.0434		1,257.1273
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0275	1.3996	0.4423	5.6100e-003	0.2154	0.0137	0.2291	0.0595	0.0131	0.0726		607.9757	607.9757	0.0227	0.0962	637.2132
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.2000e-004	7.9000e-003		60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408
Worker	0.0142	8.1600e-003	0.1611	6.5000e-004	0.1030	2.1000e-004	0.1033	0.0275	2.0000e-004	0.0277		73.7293	73.7293	7.2000e-004	1.3900e-003	74.1609
Total	0.0454	1.5491	0.6592	6.8200e-003	0.3424	0.0149	0.3573	0.0940	0.0142	0.1082		741.9803	741.9803	0.0247	0.1064	774.3148

3.5 Grading - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626		1,633.8245	1,633.8245	0.0582		1,635.2789
Total	0.6620	2.2462	4.8010	0.0173	5.3119	0.0626	5.3745	2.5686	0.0626	2.6311		1,633.8245	1,633.8245	0.0582		1,635.2789

Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408
Worker	0.0113	6.5300e-003	0.1289	5.2000e-004	0.0894	1.7000e-004	0.0896	0.0237	1.6000e-004	0.0239		58.9834	58.9834	5.7000e-004	1.1100e-003	59.3287
<b>Total</b>	<b>0.0151</b>	<b>0.1479</b>	<b>0.1846</b>	<b>1.0800e-003</b>	<b>0.1150</b>	<b>1.1400e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.0800e-003</b>	<b>0.0322</b>		<b>119.2588</b>	<b>119.2588</b>	<b>1.9100e-003</b>	<b>9.9400e-003</b>	<b>122.2695</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626	0.0000	1,633.8245	1,633.8245	0.0582		1,635.2789
<b>Total</b>	<b>0.6620</b>	<b>2.2462</b>	<b>4.8010</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0626</b>	<b>2.3334</b>	<b>1.0981</b>	<b>0.0626</b>	<b>1.1606</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0582</b>		<b>1,635.2789</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.2000e-004	7.9000e-003	60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408	
Worker	0.0113	6.5300e-003	0.1289	5.2000e-004	0.0824	1.7000e-004	0.0826	0.0220	1.6000e-004	0.0222	58.9834	58.9834	5.7000e-004	1.1100e-003	59.3287	
<b>Total</b>	<b>0.0151</b>	<b>0.1479</b>	<b>0.1846</b>	<b>1.0800e-003</b>	<b>0.1064</b>	<b>1.1400e-003</b>	<b>0.1076</b>	<b>0.0290</b>	<b>1.0800e-003</b>	<b>0.0301</b>	<b>119.2588</b>	<b>119.2588</b>	<b>1.9100e-003</b>	<b>9.9400e-003</b>	<b>122.2695</b>	

**3.6 Paving - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844		1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 4 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0255	0.0147	0.2900	1.1800e-003	0.2012	3.9000e-004	0.2016	0.0534	3.6000e-004	0.0537		132.7127	132.7127	1.2900e-003	2.5000e-003	133.4896
<b>Total</b>	<b>0.0255</b>	<b>0.0147</b>	<b>0.2900</b>	<b>1.1800e-003</b>	<b>0.2012</b>	<b>3.9000e-004</b>	<b>0.2016</b>	<b>0.0534</b>	<b>3.6000e-004</b>	<b>0.0537</b>		<b>132.7127</b>	<b>132.7127</b>	<b>1.2900e-003</b>	<b>2.5000e-003</b>	<b>133.4896</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844	0.0000	1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0255	0.0147	0.2900	1.1800e-003	0.1855	3.9000e-004	0.1858	0.0495	3.6000e-004	0.0499		132.7127	132.7127	1.2900e-003	2.5000e-003	133.4896
<b>Total</b>	<b>0.0255</b>	<b>0.0147</b>	<b>0.2900</b>	<b>1.1800e-003</b>	<b>0.1855</b>	<b>3.9000e-004</b>	<b>0.1858</b>	<b>0.0495</b>	<b>3.6000e-004</b>	<b>0.0499</b>		<b>132.7127</b>	<b>132.7127</b>	<b>1.2900e-003</b>	<b>2.5000e-003</b>	<b>133.4896</b>

Construction Phase 4 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Site Preparation - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277		1,128.1977	1,128.1977	0.0369		1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0277</b>	<b>0.5580</b>	<b>0.0573</b>	<b>0.0277</b>	<b>0.0850</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>		<b>1,129.1206</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8900e-003	0.0707	0.0279	2.8000e-004	0.0128	4.8000e-004	0.0133	3.6900e-003	4.6000e-004	4.1500e-003		30.1377	30.1377	6.7000e-004	4.4200e-003	31.4704
Worker	7.0800e-003	4.0800e-003	0.0806	3.3000e-004	0.0559	1.1000e-004	0.0560	0.0148	1.0000e-004	0.0149		36.8647	36.8647	3.6000e-004	6.9000e-004	37.0804
<b>Total</b>	<b>8.9700e-003</b>	<b>0.0747</b>	<b>0.1084</b>	<b>6.1000e-004</b>	<b>0.0687</b>	<b>5.9000e-004</b>	<b>0.0693</b>	<b>0.0185</b>	<b>5.6000e-004</b>	<b>0.0191</b>		<b>67.0023</b>	<b>67.0023</b>	<b>1.0300e-003</b>	<b>5.1100e-003</b>	<b>68.5508</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day				
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000		0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277	0.0000	1,128.1977	1,128.1977	0.0369	1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0277</b>	<b>0.2544</b>	<b>0.0245</b>	<b>0.0277</b>	<b>0.0522</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>	<b>1,129.1206</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8900e-003	0.0707	0.0279	2.8000e-004	0.0120	4.8000e-004	0.0125	3.4900e-003	4.6000e-004	3.9500e-003		30.1377	30.1377	6.7000e-004	4.4200e-003	31.4704
Worker	7.0800e-003	4.0800e-003	0.0806	3.3000e-004	0.0515	1.1000e-004	0.0516	0.0138	1.0000e-004	0.0139		36.8647	36.8647	3.6000e-004	6.9000e-004	37.0804
<b>Total</b>	<b>8.9700e-003</b>	<b>0.0747</b>	<b>0.1084</b>	<b>6.1000e-004</b>	<b>0.0635</b>	<b>5.9000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.6000e-004</b>	<b>0.0178</b>		<b>67.0023</b>	<b>67.0023</b>	<b>1.0300e-003</b>	<b>5.1100e-003</b>	<b>68.5508</b>



Construction Phase 4 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 4**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	108.75	1000sqft	0.73	108,754.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2045

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Off-road Equipment -
- Off-road Equipment -
- Demolition -
- Trips and VMT - See Construction Phase 4 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	2.50	0.73
tblTripsAndVMT	HaulingTripNumber	131.00	132.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

Construction Phase 4 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2042	0.5418	0.2089	0.4803	1.1500e-003	0.0534	2.6000e-003	0.0560	0.0138	2.5800e-003	0.0164	0.0000	103.0184	103.0184	3.1900e-003	2.6000e-003	103.8733
Maximum	0.5418	0.2089	0.4803	1.1500e-003	0.0534	2.6000e-003	0.0560	0.0138	2.5800e-003	0.0164	0.0000	103.0184	103.0184	3.1900e-003	2.6000e-003	103.8733

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2042	0.5418	0.2089	0.4803	1.1500e-003	0.0395	2.6000e-003	0.0421	0.0105	2.5800e-003	0.0131	0.0000	103.0183	103.0183	3.1900e-003	2.6000e-003	103.8732
Maximum	0.5418	0.2089	0.4803	1.1500e-003	0.0395	2.6000e-003	0.0421	0.0105	2.5800e-003	0.0131	0.0000	103.0183	103.0183	3.1900e-003	2.6000e-003	103.8732

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	25.95	0.00	24.74	24.11	0.00	20.37	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-3-2042	5-2-2042	0.1317	0.1317
2	5-3-2042	8-2-2042	0.6146	0.6146
		Highest	0.6146	0.6146

Construction Phase 4 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/17/2042	7/23/2042	5	5	
2	Building Construction	Building Construction	2/20/2042	7/9/2042	5	100	
3	Demolition	Demolition	2/3/2042	2/14/2042	5	10	
4	Grading	Grading	2/18/2042	2/19/2042	5	2	
5	Paving	Paving	7/10/2042	7/16/2042	5	5	
6	Site Preparation	Site Preparation	2/15/2042	2/17/2042	5	1	

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 163,131; Non-Residential Outdoor: 54,377; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Construction Phase 4 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	46.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Architectural Coating - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8200e-003	4.4800e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.5044</b>	<b>1.8200e-003</b>	<b>4.4800e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Construction Phase 4 - San Bernardino-South Coast County, Annual**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1535	0.1535	0.0000	0.0000	0.1544
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>2.5000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1535</b>	<b>0.1535</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1544</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8200e-003	4.4800e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.5044</b>	<b>1.8200e-003</b>	<b>4.4800e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.8000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1535	0.1535	0.0000	0.0000	0.1544
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.3000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1535</b>	<b>0.1535</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1544</b>

3.3 Building Construction - 2042

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0283	0.1393	0.3575	7.0000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	60.0010	60.0010	2.2300e-003	0.0000	60.0568
<b>Total</b>	<b>0.0283</b>	<b>0.1393</b>	<b>0.3575</b>	<b>7.0000e-004</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>60.0010</b>	<b>60.0010</b>	<b>2.2300e-003</b>	<b>0.0000</b>	<b>60.0568</b>

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0316	0.0123	1.3000e-004	5.6800e-003	2.2000e-004	5.8900e-003	1.6400e-003	2.1000e-004	1.8500e-003	0.0000	12.2843	12.2843	2.7000e-004	1.8000e-003	12.8276
Worker	2.9700e-003	1.9600e-003	0.0389	1.5000e-004	0.0252	5.0000e-005	0.0253	6.7000e-003	5.0000e-005	6.7400e-003	0.0000	15.6861	15.6861	1.5000e-004	3.0000e-004	15.7789

Construction Phase 4 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	3.8600e-003	0.0336	0.0512	2.8000e-004	0.0309	2.7000e-004	0.0312	8.3400e-003	2.6000e-004	8.5900e-003	0.0000	27.9703	27.9703	4.2000e-004	2.1000e-003	28.6064
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0283	0.1393	0.3575	7.0000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	60.0009	60.0009	2.2300e-003	0.0000	60.0567
<b>Total</b>	<b>0.0283</b>	<b>0.1393</b>	<b>0.3575</b>	<b>7.0000e-004</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>60.0009</b>	<b>60.0009</b>	<b>2.2300e-003</b>	<b>0.0000</b>	<b>60.0567</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0316	0.0123	1.3000e-004	5.3100e-003	2.2000e-004	5.5300e-003	1.5500e-003	2.1000e-004	1.7600e-003	0.0000	12.2843	12.2843	2.7000e-004	1.8000e-003	12.8276
Worker	2.9700e-003	1.9600e-003	0.0389	1.5000e-004	0.0233	5.0000e-005	0.0233	6.2100e-003	5.0000e-005	6.2600e-003	0.0000	15.6861	15.6861	1.5000e-004	3.0000e-004	15.7789
<b>Total</b>	<b>3.8600e-003</b>	<b>0.0336</b>	<b>0.0512</b>	<b>2.8000e-004</b>	<b>0.0286</b>	<b>2.7000e-004</b>	<b>0.0288</b>	<b>7.7600e-003</b>	<b>2.6000e-004</b>	<b>8.0200e-003</b>	<b>0.0000</b>	<b>27.9703</b>	<b>27.9703</b>	<b>4.2000e-004</b>	<b>2.1000e-003</b>	<b>28.6064</b>

**3.4 Demolition - 2042**

**Unmitigated Construction On-Site**

Construction Phase 4 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	2.1500e-003	0.0000	2.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-003	0.0154	0.0370	7.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	5.6973	5.6973	2.0000e-004	0.0000	5.7022
<b>Total</b>	<b>2.5000e-003</b>	<b>0.0154</b>	<b>0.0370</b>	<b>7.0000e-005</b>	<b>0.0142</b>	<b>1.8000e-004</b>	<b>0.0144</b>	<b>2.1500e-003</b>	<b>1.8000e-004</b>	<b>2.3300e-003</b>	<b>0.0000</b>	<b>5.6973</b>	<b>5.6973</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>5.7022</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	7.0100e-003	2.1900e-003	3.0000e-005	1.1400e-003	7.0000e-005	1.2000e-003	3.1000e-004	7.0000e-005	3.8000e-004	0.0000	2.7550	2.7550	1.0000e-004	4.4000e-004	2.8875
Vendor	2.0000e-005	7.0000e-004	2.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	4.0000e-005	0.2851
Worker	6.0000e-005	4.0000e-005	8.4000e-004	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.3410	0.3410	0.0000	1.0000e-005	0.3430
<b>Total</b>	<b>2.2000e-004</b>	<b>7.7500e-003</b>	<b>3.3000e-003</b>	<b>3.0000e-005</b>	<b>1.8200e-003</b>	<b>7.0000e-005</b>	<b>1.8800e-003</b>	<b>5.0000e-004</b>	<b>7.0000e-005</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>3.3690</b>	<b>3.3690</b>	<b>1.1000e-004</b>	<b>4.9000e-004</b>	<b>3.5156</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					6.0700e-003	0.0000	6.0700e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-003	0.0154	0.0370	7.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	5.6973	5.6973	2.0000e-004	0.0000	5.7022
<b>Total</b>	<b>2.5000e-003</b>	<b>0.0154</b>	<b>0.0370</b>	<b>7.0000e-005</b>	<b>6.0700e-003</b>	<b>1.8000e-004</b>	<b>6.2500e-003</b>	<b>9.2000e-004</b>	<b>1.8000e-004</b>	<b>1.1000e-003</b>	<b>0.0000</b>	<b>5.6973</b>	<b>5.6973</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>5.7022</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	7.0100e-003	2.1900e-003	3.0000e-005	1.0600e-003	7.0000e-005	1.1300e-003	2.9000e-004	7.0000e-005	3.6000e-004	0.0000	2.7550	2.7550	1.0000e-004	4.4000e-004	2.8875
Vendor	2.0000e-005	7.0000e-004	2.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	4.0000e-005	0.2851
Worker	6.0000e-005	4.0000e-005	8.4000e-004	0.0000	5.1000e-004	0.0000	5.1000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3410	0.3410	0.0000	1.0000e-005	0.3435
<b>Total</b>	<b>2.2000e-004</b>	<b>7.7500e-003</b>	<b>3.3000e-003</b>	<b>3.0000e-005</b>	<b>1.6900e-003</b>	<b>7.0000e-005</b>	<b>1.7600e-003</b>	<b>4.6000e-004</b>	<b>7.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>3.3690</b>	<b>3.3690</b>	<b>1.1000e-004</b>	<b>4.9000e-004</b>	<b>3.5156</b>

**3.5 Grading - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	2.2500e-003	4.8000e-003	2.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.4822	1.4822	5.0000e-005	0.0000	1.4835
<b>Total</b>	<b>6.6000e-004</b>	<b>2.2500e-003</b>	<b>4.8000e-003</b>	<b>2.0000e-005</b>	<b>5.3100e-003</b>	<b>6.0000e-005</b>	<b>5.3700e-003</b>	<b>2.5700e-003</b>	<b>6.0000e-005</b>	<b>2.6300e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.4835</b>

**Construction Phase 4 - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0546	0.0546	0.0000	1.0000e-005	0.0570
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0546	0.0546	0.0000	0.0000	0.0549
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1119</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	1.1000e-003	0.0000	1.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	2.2500e-003	4.8000e-003	2.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.4822	1.4822	5.0000e-005	0.0000	1.4835
<b>Total</b>	<b>6.6000e-004</b>	<b>2.2500e-003</b>	<b>4.8000e-003</b>	<b>2.0000e-005</b>	<b>2.2700e-003</b>	<b>6.0000e-005</b>	<b>2.3300e-003</b>	<b>1.1000e-003</b>	<b>6.0000e-005</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.4835</b>

**Mitigated Construction Off-Site**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0546	0.0546	0.0000	1.0000e-005	0.0570
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0546	0.0546	0.0000	0.0000	0.0549
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1119</b>

3.6 Paving - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5200e-003	7.8300e-003	0.0187	3.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.7483	2.7483	1.2000e-004	0.0000	2.7513
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.5200e-003</b>	<b>7.8300e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.7513</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	7.6000e-004	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3069	0.3069	0.0000	1.0000e-005	0.3087
<b>Total</b>	<b>6.0000e-005</b>	<b>4.0000e-005</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3069</b>	<b>0.3069</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.3087</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5200e-003	7.8300e-003	0.0187	3.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.7483	2.7483	1.2000e-004	0.0000	2.7513
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.5200e-003</b>	<b>7.8300e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.7513</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	7.6000e-004	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3069	0.3069	0.0000	1.0000e-005	0.3087

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	6.0000e-005	4.0000e-005	7.6000e-004	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3069	0.3069	0.0000	1.0000e-005	0.3087
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**3.7 Site Preparation - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.1000e-004	1.9400e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
<b>Total</b>	<b>2.1000e-004</b>	<b>7.1000e-004</b>	<b>1.9400e-003</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>1.0000e-005</b>	<b>2.8000e-004</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.5117</b>	<b>0.5117</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5122</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0137	0.0137	0.0000	0.0000	0.0143
Worker	0.0000	0.0000	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0171	0.0171	0.0000	0.0000	0.0172
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0307</b>	<b>0.0307</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0314</b>

Construction Phase 4 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-004	0.0000	1.1000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.1000e-004	1.9400e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
<b>Total</b>	<b>2.1000e-004</b>	<b>7.1000e-004</b>	<b>1.9400e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>1.0000e-005</b>	<b>1.2000e-004</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5117</b>	<b>0.5117</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5122</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0137	0.0137	0.0000	0.0000	0.0143
Worker	0.0000	0.0000	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0171	0.0171	0.0000	0.0000	0.0172
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0307</b>	<b>0.0307</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0314</b>

**Construction Phase 4**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	7	No Change	0.00

**Construction Phase 4**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.90000E-004	1.82000E-003	4.48000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38880E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	1.02000E-003	7.48000E-003	1.81300E-002	3.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	2.68828E+000	2.68828E+000	8.00000E-005	0.00000E+000	2.69029E+000
Cranes	5.76000E-003	1.01600E-002	3.37900E-002	1.80000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.60000E-004	0.00000E+000	1.52395E+001
Forklifts	6.50000E-003	3.51100E-002	8.93300E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Graders	3.20000E-004	6.10000E-004	1.92000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	4.50000E-004	1.23000E-003	6.99000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08693E+000
Rollers	2.80000E-004	1.79000E-003	4.25000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05230E-001
Rubber Tired Dozers	6.10000E-004	1.94000E-003	2.94000E-003	1.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	1.23525E+000	1.23525E+000	5.00000E-005	0.00000E+000	1.23645E+000
Tractors/Loaders/Bulldozers	1.78600E-002	1.04400E-001	2.60330E-001	4.20000E-004	1.12000E-003	1.12000E-003	0.00000E+000	3.62441E+001	3.62441E+001	1.40000E-003	0.00000E+000	3.62792E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	2.90000E-004	1.82000E-003	4.48000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38870E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	1.02000E-003	7.48000E-003	1.81300E-002	3.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	2.68828E+000	2.68828E+000	8.00000E-005	0.00000E+000	2.69029E+000
Cranes	5.76000E-003	1.01600E-002	3.37900E-002	1.80000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.60000E-004	0.00000E+000	1.52395E+001
Forklifts	6.50000E-003	3.51100E-002	8.93300E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Graders	3.20000E-004	6.10000E-004	1.92000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	4.50000E-004	1.23000E-003	6.99000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08693E+000
Rollers	2.80000E-004	1.79000E-003	4.25000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05230E-001
Rubber Tired Dozers	6.10000E-004	1.94000E-003	2.94000E-003	1.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	1.23525E+000	1.23525E+000	5.00000E-005	0.00000E+000	1.23645E+000
Tractors/Loaders/Bulldozers	1.78600E-002	1.04400E-001	2.60330E-001	4.20000E-004	1.12000E-003	1.12000E-003	0.00000E+000	3.62441E+001	3.62441E+001	1.40000E-003	0.00000E+000	3.62792E+001



**Construction Phase 4**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.56524E-005
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31336E-006	1.31336E-006	0.00000E+000	0.00000E+000	1.31238E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64760E-006	1.64760E-006	0.00000E+000	0.00000E+000	8.22931E-007
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Bulldozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10363E-006	1.10363E-006	0.00000E+000	0.00000E+000	1.37820E-006

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction 0.00
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction 5.00
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction 55.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph) 15.00
Yes	Clean Paved Road	% PM Reduction	9.00	Frequency (per day) 2.00

### Construction Phase 4

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.08	0.14
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.03	0.01	0.03	0.01	0.08	0.07
Demolition	Fugitive Dust	0.01	0.00	0.01	0.00	0.57	0.57
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.08
Grading	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.17	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.59	0.67
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

# CalEEMod Output: Phase 4 Construction – Mitigated

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Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 4 Mitigated**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	108.75	1000sqft	0.73	108,754.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2045

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Off-road Equipment -
- Off-road Equipment -
- Trips and VMT - See Construction Phase 4 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	2.50	0.73
tblTripsAndVMT	HaulingTripNumber	131.00	132.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	40.4536	4.5495	8.2886	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746
Maximum	40.4536	4.5495	8.2886	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	40.4536	4.5495	8.2886	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746
Maximum	40.4536	4.5495	8.2886	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	2,004.4205	2,004.4205	0.0682	0.1062	2,037.7746

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.20	0.00	55.54	56.65	0.00	55.29	0.00	0.00	0.00	0.00	0.00	0.00

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/3/2042	2/14/2042	5	10	
2	Site Preparation	Site Preparation	2/15/2042	2/17/2042	5	1	
3	Grading	Grading	2/18/2042	2/19/2042	5	2	
4	Building Construction	Building Construction	2/20/2042	7/9/2042	5	100	
5	Paving	Paving	7/10/2042	7/16/2042	5	5	
6	Architectural Coating	Architectural Coating	7/17/2042	7/23/2042	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 163,131; Non-Residential Outdoor: 54,377; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Architectural Coating	Air Compressors	1	6.00	78	0.48
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**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	46.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8418	0.0000	2.8418	0.4303	0.0000	0.4303			0.0000			0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355		1,256.0421	1,256.0421	0.0434		1,257.1273
<b>Total</b>	<b>0.4996</b>	<b>3.0819</b>	<b>7.4089</b>	<b>0.0133</b>	<b>2.8418</b>	<b>0.0355</b>	<b>2.8773</b>	<b>0.4303</b>	<b>0.0355</b>	<b>0.4658</b>		<b>1,256.0421</b>	<b>1,256.0421</b>	<b>0.0434</b>		<b>1,257.1273</b>

**Unmitigated Construction Off-Site**



Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0299	1.3261	0.4345	5.6000e-003	0.2311	0.0137	0.2448	0.0634	0.0131	0.0765		606.9530	606.9530	0.0228	0.0961	636.1451
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0256	9.6000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726
Worker	0.0141	7.8000e-003	0.1946	7.2000e-004	0.1118	2.1000e-004	0.1120	0.0296	2.0000e-004	0.0298		81.3103	81.3103	7.0000e-004	1.3500e-003	81.7296
<b>Total</b>	<b>0.0482</b>	<b>1.4676</b>	<b>0.6831</b>	<b>6.8800e-003</b>	<b>0.3685</b>	<b>0.0149</b>	<b>0.3834</b>	<b>0.1004</b>	<b>0.0142</b>	<b>0.1146</b>		<b>748.3784</b>	<b>748.3784</b>	<b>0.0248</b>	<b>0.1062</b>	<b>780.6472</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2149	0.0000	1.2149	0.1839	0.0000	0.1839			0.0000			0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355	0.0000	1,256.0421	1,256.0421	0.0434		1,257.1273
<b>Total</b>	<b>0.4996</b>	<b>3.0819</b>	<b>7.4089</b>	<b>0.0133</b>	<b>1.2149</b>	<b>0.0355</b>	<b>1.2504</b>	<b>0.1839</b>	<b>0.0355</b>	<b>0.2194</b>	<b>0.0000</b>	<b>1,256.0421</b>	<b>1,256.0421</b>	<b>0.0434</b>		<b>1,257.1273</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0299	1.3261	0.4345	5.6000e-003	0.2154	0.0137	0.2291	0.0595	0.0131	0.0726		606.9530	606.9530	0.0228	0.0961	636.1451
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0240	9.6000e-004	0.0249	6.9800e-003	9.2000e-004	7.9000e-003		60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726
Worker	0.0141	7.8000e-003	0.1946	7.2000e-004	0.1030	2.1000e-004	0.1033	0.0275	2.0000e-004	0.0277		81.3103	81.3103	7.0000e-004	1.3500e-003	81.7296
<b>Total</b>	<b>0.0482</b>	<b>1.4676</b>	<b>0.6831</b>	<b>6.8800e-003</b>	<b>0.3424</b>	<b>0.0149</b>	<b>0.3573</b>	<b>0.0940</b>	<b>0.0142</b>	<b>0.1082</b>		<b>748.3784</b>	<b>748.3784</b>	<b>0.0248</b>	<b>0.1062</b>	<b>780.6472</b>

**3.3 Site Preparation - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277		1,128.1977	1,128.1977	0.0369		1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0277</b>	<b>0.5580</b>	<b>0.0573</b>	<b>0.0277</b>	<b>0.0850</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>		<b>1,129.1206</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0700e-003	0.0668	0.0270	2.8000e-004	0.0128	4.8000e-004	0.0133	3.6900e-003	4.6000e-004	4.1500e-003		30.0576	30.0576	6.8000e-004	4.4000e-003	31.3863
Worker	7.0700e-003	3.9000e-003	0.0973	3.6000e-004	0.0559	1.1000e-004	0.0560	0.0148	1.0000e-004	0.0149		40.6551	40.6551	3.5000e-004	6.7000e-004	40.8648

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	9.1400e-003	0.0707	0.1243	6.4000e-004	0.0687	5.9000e-004	0.0693	0.0185	5.6000e-004	0.0191		70.7127	70.7127	1.0300e-003	5.0700e-003	72.2511
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277	0.0000	1,128.1977	1,128.1977	0.0369		1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0277</b>	<b>0.2544</b>	<b>0.0245</b>	<b>0.0277</b>	<b>0.0522</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>		<b>1,129.1206</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0700e-003	0.0688	0.0270	2.8000e-004	0.0120	4.8000e-004	0.0125	3.4900e-003	4.6000e-004	3.9500e-003		30.0576	30.0576	6.8000e-004	4.4000e-003	31.3863
Worker	7.0700e-003	3.9000e-003	0.0973	3.6000e-004	0.0515	1.1000e-004	0.0516	0.0138	1.0000e-004	0.0139		40.6551	40.6551	3.5000e-004	6.7000e-004	40.8648
<b>Total</b>	<b>9.1400e-003</b>	<b>0.0707</b>	<b>0.1243</b>	<b>6.4000e-004</b>	<b>0.0635</b>	<b>5.9000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.6000e-004</b>	<b>0.0178</b>		<b>70.7127</b>	<b>70.7127</b>	<b>1.0300e-003</b>	<b>5.0700e-003</b>	<b>72.2511</b>

3.4 Grading - 2042

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626		1,633.8245	1,633.8245	0.0582		1,635.2789
<b>Total</b>	<b>0.6620</b>	<b>2.2462</b>	<b>4.8010</b>	<b>0.0173</b>	<b>5.3119</b>	<b>0.0626</b>	<b>5.3745</b>	<b>2.5686</b>	<b>0.0626</b>	<b>2.6311</b>		<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0582</b>		<b>1,635.2789</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0256	9.6000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726
Worker	0.0113	6.2400e-003	0.1557	5.8000e-004	0.0894	1.7000e-004	0.0896	0.0237	1.6000e-004	0.0239		65.0482	65.0482	5.6000e-004	1.0800e-003	65.3837
<b>Total</b>	<b>0.0154</b>	<b>0.1399</b>	<b>0.2097</b>	<b>1.1400e-003</b>	<b>0.1150</b>	<b>1.1300e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.0800e-003</b>	<b>0.0322</b>		<b>125.1634</b>	<b>125.1634</b>	<b>1.9100e-003</b>	<b>9.8800e-003</b>	<b>128.1562</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000		0.0000	
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626	0.0000	1,633.8245	1,633.8245	0.0582		1,635.2789
<b>Total</b>	<b>0.6620</b>	<b>2.2462</b>	<b>4.8010</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0626</b>	<b>2.3334</b>	<b>1.0981</b>	<b>0.0626</b>	<b>1.1606</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0582</b>		<b>1,635.2789</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1336	0.0540	5.6000e-004	0.0240	9.6000e-004	0.0249	6.9800e-003	9.2000e-004	7.9000e-003		60.1152	60.1152	1.3500e-003	8.8000e-003	62.7726
Worker	0.0113	6.2400e-003	0.1557	5.8000e-004	0.0824	1.7000e-004	0.0826	0.0220	1.6000e-004	0.0222		65.0482	65.0482	5.6000e-004	1.0800e-003	65.3837
<b>Total</b>	<b>0.0154</b>	<b>0.1399</b>	<b>0.2097</b>	<b>1.1400e-003</b>	<b>0.1064</b>	<b>1.1300e-003</b>	<b>0.1075</b>	<b>0.0290</b>	<b>1.0800e-003</b>	<b>0.0301</b>		<b>125.1634</b>	<b>125.1634</b>	<b>1.9100e-003</b>	<b>9.8800e-003</b>	<b>128.1562</b>

**3.5 Building Construction - 2042**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355		1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0186	0.6013	0.2431	2.5300e-003	0.1153	4.3300e-003	0.1196	0.0332	4.1400e-003	0.0373		270.5183	270.5183	6.0900e-003	0.0396	282.4765
Worker	0.0650	0.0359	0.8952	3.3200e-003	0.5142	9.9000e-004	0.5152	0.1364	9.1000e-004	0.1373		374.0273	374.0273	3.2000e-003	6.2000e-003	375.9561
<b>Total</b>	<b>0.0836</b>	<b>0.6372</b>	<b>1.1382</b>	<b>5.8500e-003</b>	<b>0.6295</b>	<b>5.3200e-003</b>	<b>0.6348</b>	<b>0.1696</b>	<b>5.0500e-003</b>	<b>0.1746</b>		<b>644.5456</b>	<b>644.5456</b>	<b>9.2900e-003</b>	<b>0.0458</b>	<b>658.4326</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355	0.0000	1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

**Mitigated Construction Off-Site**

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0186	0.6013	0.2431	2.5300e-003	0.1079	4.3300e-003	0.1123	0.0314	4.1400e-003	0.0355		270.5183	270.5183	6.0900e-003	0.0396	282.4765
Worker	0.0650	0.0359	0.8952	3.3200e-003	0.4739	9.9000e-004	0.4749	0.1265	9.1000e-004	0.1274		374.0273	374.0273	3.2000e-003	6.2000e-003	375.9561
<b>Total</b>	<b>0.0836</b>	<b>0.6372</b>	<b>1.1382</b>	<b>5.8500e-003</b>	<b>0.5819</b>	<b>5.3200e-003</b>	<b>0.5872</b>	<b>0.1579</b>	<b>5.0500e-003</b>	<b>0.1629</b>		<b>644.5456</b>	<b>644.5456</b>	<b>9.2900e-003</b>	<b>0.0458</b>	<b>658.4326</b>

3.6 Paving - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844		1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0140	0.3503	1.3000e-003	0.2012	3.9000e-004	0.2016	0.0534	3.6000e-004	0.0537		146.3585	146.3585	1.2500e-003	2.4300e-003	147.1133
<b>Total</b>	<b>0.0254</b>	<b>0.0140</b>	<b>0.3503</b>	<b>1.3000e-003</b>	<b>0.2012</b>	<b>3.9000e-004</b>	<b>0.2016</b>	<b>0.0534</b>	<b>3.6000e-004</b>	<b>0.0537</b>		<b>146.3585</b>	<b>146.3585</b>	<b>1.2500e-003</b>	<b>2.4300e-003</b>	<b>147.1133</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844	0.0000	1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0140	0.3503	1.3000e-003	0.1855	3.9000e-004	0.1858	0.0495	3.6000e-004	0.0499		146.3585	146.3585	1.2500e-003	2.4300e-003	147.1133
<b>Total</b>	<b>0.0254</b>	<b>0.0140</b>	<b>0.3503</b>	<b>1.3000e-003</b>	<b>0.1855</b>	<b>3.9000e-004</b>	<b>0.1858</b>	<b>0.0495</b>	<b>3.6000e-004</b>	<b>0.0499</b>		<b>146.3585</b>	<b>146.3585</b>	<b>1.2500e-003</b>	<b>2.4300e-003</b>	<b>147.1133</b>



Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2042**  
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.3260					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>40.4409</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	7.0200e-003	0.1751	6.5000e-004	0.1006	1.9000e-004	0.1008	0.0267	1.8000e-004	0.0269		73.1793	73.1793	6.3000e-004	1.2100e-003	73.5566
<b>Total</b>	<b>0.0127</b>	<b>7.0200e-003</b>	<b>0.1751</b>	<b>6.5000e-004</b>	<b>0.1006</b>	<b>1.9000e-004</b>	<b>0.1008</b>	<b>0.0267</b>	<b>1.8000e-004</b>	<b>0.0269</b>		<b>73.1793</b>	<b>73.1793</b>	<b>6.3000e-004</b>	<b>1.2100e-003</b>	<b>73.5566</b>

Mitigated Construction On-Site

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.3260					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>40.4409</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	7.0200e-003	0.1751	6.5000e-004	0.0927	1.9000e-004	0.0929	0.0248	1.8000e-004	0.0249		73.1793	73.1793	6.3000e-004	1.2100e-003	73.5566
<b>Total</b>	<b>0.0127</b>	<b>7.0200e-003</b>	<b>0.1751</b>	<b>6.5000e-004</b>	<b>0.0927</b>	<b>1.9000e-004</b>	<b>0.0929</b>	<b>0.0248</b>	<b>1.8000e-004</b>	<b>0.0249</b>		<b>73.1793</b>	<b>73.1793</b>	<b>6.3000e-004</b>	<b>1.2100e-003</b>	<b>73.5566</b>

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 4 Mitigated**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	108.75	1000sqft	0.73	108,754.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2045

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Off-road Equipment -
- Off-road Equipment -
- Trips and VMT - See Construction Phase 4 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	2.50	0.73
tblTripsAndVMT	HaulingTripNumber	131.00	132.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	40.4536	4.6310	8.1423	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422
Maximum	40.4536	4.6310	8.1423	0.0201	5.4270	0.0848	5.4907	2.5996	0.0848	2.6633	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2042	40.4536	4.6310	8.1423	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422
Maximum	40.4536	4.6310	8.1423	0.0201	2.3773	0.0848	2.4410	1.1270	0.0848	1.1907	0.0000	1,998.0224	1,998.0224	0.0681	0.1064	2,031.4422

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.20	0.00	55.54	56.65	0.00	55.29	0.00	0.00	0.00	0.00	0.00	0.00

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/3/2042	2/14/2042	5	10	
2	Site Preparation	Site Preparation	2/15/2042	2/17/2042	5	1	
3	Grading	Grading	2/18/2042	2/19/2042	5	2	
4	Building Construction	Building Construction	2/20/2042	7/9/2042	5	100	
5	Paving	Paving	7/10/2042	7/16/2042	5	5	
6	Architectural Coating	Architectural Coating	7/17/2042	7/23/2042	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 163,131; Non-Residential Outdoor: 54,377; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Architectural Coating	Air Compressors	1	6.00	78	0.48
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**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	46.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8418	0.0000	2.8418	0.4303	0.0000	0.4303			0.0000			0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355		1,256.0421	1,256.0421	0.0434		1,257.1273
<b>Total</b>	<b>0.4996</b>	<b>3.0819</b>	<b>7.4089</b>	<b>0.0133</b>	<b>2.8418</b>	<b>0.0355</b>	<b>2.8773</b>	<b>0.4303</b>	<b>0.0355</b>	<b>0.4658</b>		<b>1,256.0421</b>	<b>1,256.0421</b>	<b>0.0434</b>		<b>1,257.1273</b>

**Unmitigated Construction Off-Site**

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0275	1.3996	0.4423	5.6100e-003	0.2311	0.0137	0.2448	0.0634	0.0131	0.0765		607.9757	607.9757	0.0227	0.0962	637.2132
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408
Worker	0.0142	8.1600e-003	0.1611	6.5000e-004	0.1118	2.1000e-004	0.1120	0.0296	2.0000e-004	0.0298		73.7293	73.7293	7.2000e-004	1.3900e-003	74.1609
<b>Total</b>	<b>0.0454</b>	<b>1.5491</b>	<b>0.6592</b>	<b>6.8200e-003</b>	<b>0.3685</b>	<b>0.0149</b>	<b>0.3834</b>	<b>0.1004</b>	<b>0.0142</b>	<b>0.1146</b>		<b>741.9803</b>	<b>741.9803</b>	<b>0.0247</b>	<b>0.1064</b>	<b>774.3148</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2149	0.0000	1.2149	0.1839	0.0000	0.1839			0.0000			0.0000
Off-Road	0.4996	3.0819	7.4089	0.0133		0.0355	0.0355		0.0355	0.0355	0.0000	1,256.0421	1,256.0421	0.0434		1,257.1273
<b>Total</b>	<b>0.4996</b>	<b>3.0819</b>	<b>7.4089</b>	<b>0.0133</b>	<b>1.2149</b>	<b>0.0355</b>	<b>1.2504</b>	<b>0.1839</b>	<b>0.0355</b>	<b>0.2194</b>	<b>0.0000</b>	<b>1,256.0421</b>	<b>1,256.0421</b>	<b>0.0434</b>		<b>1,257.1273</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0275	1.3996	0.4423	5.6100e-003	0.2154	0.0137	0.2291	0.0595	0.0131	0.0726		607.9757	607.9757	0.0227	0.0962	637.2132
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.2000e-004	7.9000e-003		60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408
Worker	0.0142	8.1600e-003	0.1611	6.5000e-004	0.1030	2.1000e-004	0.1033	0.0275	2.0000e-004	0.0277		73.7293	73.7293	7.2000e-004	1.3900e-003	74.1609
<b>Total</b>	<b>0.0454</b>	<b>1.5491</b>	<b>0.6592</b>	<b>6.8200e-003</b>	<b>0.3424</b>	<b>0.0149</b>	<b>0.3573</b>	<b>0.0940</b>	<b>0.0142</b>	<b>0.1082</b>		<b>741.9803</b>	<b>741.9803</b>	<b>0.0247</b>	<b>0.1064</b>	<b>774.3148</b>

**3.3 Site Preparation - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277		1,128.1977	1,128.1977	0.0369		1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.5303</b>	<b>0.0277</b>	<b>0.5580</b>	<b>0.0573</b>	<b>0.0277</b>	<b>0.0850</b>		<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>		<b>1,129.1206</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8900e-003	0.0707	0.0279	2.8000e-004	0.0128	4.8000e-004	0.0133	3.6900e-003	4.6000e-004	4.1500e-003		30.1377	30.1377	6.7000e-004	4.4200e-003	31.4704
Worker	7.0800e-003	4.0800e-003	0.0806	3.3000e-004	0.0559	1.1000e-004	0.0560	0.0148	1.0000e-004	0.0149		36.8647	36.8647	3.6000e-004	6.9000e-004	37.0804



Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	8.9700e-003	0.0747	0.1084	6.1000e-004	0.0687	5.9000e-004	0.0693	0.0185	5.6000e-004	0.0191		67.0023	67.0023	1.0300e-003	5.1100e-003	68.5508
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4150	1.4268	3.8760	0.0119		0.0277	0.0277		0.0277	0.0277	0.0000	1,128.1977	1,128.1977	0.0369		1,129.1206
<b>Total</b>	<b>0.4150</b>	<b>1.4268</b>	<b>3.8760</b>	<b>0.0119</b>	<b>0.2267</b>	<b>0.0277</b>	<b>0.2544</b>	<b>0.0245</b>	<b>0.0277</b>	<b>0.0522</b>	<b>0.0000</b>	<b>1,128.1977</b>	<b>1,128.1977</b>	<b>0.0369</b>		<b>1,129.1206</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8900e-003	0.0707	0.0279	2.8000e-004	0.0120	4.8000e-004	0.0125	3.4900e-003	4.6000e-004	3.9500e-003		30.1377	30.1377	6.7000e-004	4.4200e-003	31.4704
Worker	7.0800e-003	4.0800e-003	0.0806	3.3000e-004	0.0515	1.1000e-004	0.0516	0.0138	1.0000e-004	0.0139		36.8647	36.8647	3.6000e-004	6.9000e-004	37.0804
<b>Total</b>	<b>8.9700e-003</b>	<b>0.0747</b>	<b>0.1084</b>	<b>6.1000e-004</b>	<b>0.0635</b>	<b>5.9000e-004</b>	<b>0.0641</b>	<b>0.0172</b>	<b>5.6000e-004</b>	<b>0.0178</b>		<b>67.0023</b>	<b>67.0023</b>	<b>1.0300e-003</b>	<b>5.1100e-003</b>	<b>68.5508</b>

3.4 Grading - 2042

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626		1,633.8245	1,633.8245	0.0582		1,635.2789
<b>Total</b>	<b>0.6620</b>	<b>2.2462</b>	<b>4.8010</b>	<b>0.0173</b>	<b>5.3119</b>	<b>0.0626</b>	<b>5.3745</b>	<b>2.5686</b>	<b>0.0626</b>	<b>2.6311</b>		<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0582</b>		<b>1,635.2789</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408
Worker	0.0113	6.5300e-003	0.1289	5.2000e-004	0.0894	1.7000e-004	0.0896	0.0237	1.6000e-004	0.0239		58.9834	58.9834	5.7000e-004	1.1100e-003	59.3287
<b>Total</b>	<b>0.0151</b>	<b>0.1479</b>	<b>0.1846</b>	<b>1.0800e-003</b>	<b>0.1150</b>	<b>1.1400e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.0800e-003</b>	<b>0.0322</b>		<b>119.2588</b>	<b>119.2588</b>	<b>1.9100e-003</b>	<b>9.9400e-003</b>	<b>122.2695</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day				
Fugitive Dust					2.2709	0.0000	2.2709	1.0981	0.0000	1.0981			0.0000		0.0000
Off-Road	0.6620	2.2462	4.8010	0.0173		0.0626	0.0626		0.0626	0.0626	0.0000	1,633.8245	1,633.8245	0.0582	1,635.2789
<b>Total</b>	<b>0.6620</b>	<b>2.2462</b>	<b>4.8010</b>	<b>0.0173</b>	<b>2.2709</b>	<b>0.0626</b>	<b>2.3334</b>	<b>1.0981</b>	<b>0.0626</b>	<b>1.1606</b>	<b>0.0000</b>	<b>1,633.8245</b>	<b>1,633.8245</b>	<b>0.0582</b>	<b>1,635.2789</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7900e-003	0.1413	0.0558	5.6000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.2000e-004	7.9000e-003		60.2753	60.2753	1.3400e-003	8.8300e-003	62.9408
Worker	0.0113	6.5300e-003	0.1289	5.2000e-004	0.0824	1.7000e-004	0.0826	0.0220	1.6000e-004	0.0222		58.9834	58.9834	5.7000e-004	1.1100e-003	59.3287
<b>Total</b>	<b>0.0151</b>	<b>0.1479</b>	<b>0.1846</b>	<b>1.0800e-003</b>	<b>0.1064</b>	<b>1.1400e-003</b>	<b>0.1076</b>	<b>0.0290</b>	<b>1.0800e-003</b>	<b>0.0301</b>		<b>119.2588</b>	<b>119.2588</b>	<b>1.9100e-003</b>	<b>9.9400e-003</b>	<b>122.2695</b>

**3.5 Building Construction - 2042**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355		1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>		<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0170	0.6360	0.2509	2.5400e-003	0.1153	4.3400e-003	0.1197	0.0332	4.1600e-003	0.0374		271.2390	271.2390	6.0100e-003	0.0398	283.2335
Worker	0.0651	0.0375	0.7410	3.0100e-003	0.5142	9.9000e-004	0.5152	0.1364	9.1000e-004	0.1373		339.1547	339.1547	3.3000e-003	6.3900e-003	341.1400
<b>Total</b>	<b>0.0822</b>	<b>0.6735</b>	<b>0.9919</b>	<b>5.5500e-003</b>	<b>0.6295</b>	<b>5.3300e-003</b>	<b>0.6348</b>	<b>0.1696</b>	<b>5.0700e-003</b>	<b>0.1746</b>		<b>610.3938</b>	<b>610.3938</b>	<b>9.3100e-003</b>	<b>0.0461</b>	<b>624.3736</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5667	2.7853	7.1504	0.0140		0.0355	0.0355		0.0355	0.0355	0.0000	1,322.7958	1,322.7958	0.0492		1,324.0257
<b>Total</b>	<b>0.5667</b>	<b>2.7853</b>	<b>7.1504</b>	<b>0.0140</b>		<b>0.0355</b>	<b>0.0355</b>		<b>0.0355</b>	<b>0.0355</b>	<b>0.0000</b>	<b>1,322.7958</b>	<b>1,322.7958</b>	<b>0.0492</b>		<b>1,324.0257</b>

**Mitigated Construction Off-Site**

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0170	0.6360	0.2509	2.5400e-003	0.1079	4.3400e-003	0.1123	0.0314	4.1600e-003	0.0355		271.2390	271.2390	6.0100e-003	0.0398	283.2335
Worker	0.0651	0.0375	0.7410	3.0100e-003	0.4739	9.9000e-004	0.4749	0.1265	9.1000e-004	0.1274		339.1547	339.1547	3.3000e-003	6.3900e-003	341.1400
<b>Total</b>	<b>0.0822</b>	<b>0.6735</b>	<b>0.9919</b>	<b>5.5500e-003</b>	<b>0.5819</b>	<b>5.3300e-003</b>	<b>0.5872</b>	<b>0.1579</b>	<b>5.0700e-003</b>	<b>0.1629</b>		<b>610.3938</b>	<b>610.3938</b>	<b>9.3100e-003</b>	<b>0.0461</b>	<b>624.3736</b>

3.6 Paving - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844		1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>		<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0255	0.0147	0.2900	1.1800e-003	0.2012	3.9000e-004	0.2016	0.0534	3.6000e-004	0.0537		132.7127	132.7127	1.2900e-003	2.5000e-003	133.4896
<b>Total</b>	<b>0.0255</b>	<b>0.0147</b>	<b>0.2900</b>	<b>1.1800e-003</b>	<b>0.2012</b>	<b>3.9000e-004</b>	<b>0.2016</b>	<b>0.0534</b>	<b>3.6000e-004</b>	<b>0.0537</b>		<b>132.7127</b>	<b>132.7127</b>	<b>1.2900e-003</b>	<b>2.5000e-003</b>	<b>133.4896</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6090	3.1337	7.4736	0.0133		0.0844	0.0844		0.0844	0.0844	0.0000	1,211.7777	1,211.7777	0.0538		1,213.1222
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6090</b>	<b>3.1337</b>	<b>7.4736</b>	<b>0.0133</b>		<b>0.0844</b>	<b>0.0844</b>		<b>0.0844</b>	<b>0.0844</b>	<b>0.0000</b>	<b>1,211.7777</b>	<b>1,211.7777</b>	<b>0.0538</b>		<b>1,213.1222</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0255	0.0147	0.2900	1.1800e-003	0.1855	3.9000e-004	0.1858	0.0495	3.6000e-004	0.0499		132.7127	132.7127	1.2900e-003	2.5000e-003	133.4896
<b>Total</b>	<b>0.0255</b>	<b>0.0147</b>	<b>0.2900</b>	<b>1.1800e-003</b>	<b>0.1855</b>	<b>3.9000e-004</b>	<b>0.1858</b>	<b>0.0495</b>	<b>3.6000e-004</b>	<b>0.0499</b>		<b>132.7127</b>	<b>132.7127</b>	<b>1.2900e-003</b>	<b>2.5000e-003</b>	<b>133.4896</b>

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2042**  
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.3260					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>40.4409</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	7.3400e-003	0.1450	5.9000e-004	0.1006	1.9000e-004	0.1008	0.0267	1.8000e-004	0.0269		66.3564	66.3564	6.4000e-004	1.2500e-003	66.7448
<b>Total</b>	<b>0.0127</b>	<b>7.3400e-003</b>	<b>0.1450</b>	<b>5.9000e-004</b>	<b>0.1006</b>	<b>1.9000e-004</b>	<b>0.1008</b>	<b>0.0267</b>	<b>1.8000e-004</b>	<b>0.0269</b>		<b>66.3564</b>	<b>66.3564</b>	<b>6.4000e-004</b>	<b>1.2500e-003</b>	<b>66.7448</b>

Mitigated Construction On-Site

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.3260					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>40.4409</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	7.3400e-003	0.1450	5.9000e-004	0.0927	1.9000e-004	0.0929	0.0248	1.8000e-004	0.0249		66.3564	66.3564	6.4000e-004	1.2500e-003	66.7448
<b>Total</b>	<b>0.0127</b>	<b>7.3400e-003</b>	<b>0.1450</b>	<b>5.9000e-004</b>	<b>0.0927</b>	<b>1.9000e-004</b>	<b>0.0929</b>	<b>0.0248</b>	<b>1.8000e-004</b>	<b>0.0249</b>		<b>66.3564</b>	<b>66.3564</b>	<b>6.4000e-004</b>	<b>1.2500e-003</b>	<b>66.7448</b>



Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 4 Mitigated**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	108.75	1000sqft	0.73	108,754.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2045

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Off-road Equipment -
- Off-road Equipment -
- Trips and VMT - See Construction Phase 4 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	2.50	0.73
tblTripsAndVMT	HaulingTripNumber	131.00	132.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2042	0.1385	0.2089	0.4803	1.1500e-003	0.0534	2.6000e-003	0.0560	0.0138	2.5800e-003	0.0164	0.0000	103.0184	103.0184	3.1900e-003	2.6000e-003	103.8733
Maximum	0.1385	0.2089	0.4803	1.1500e-003	0.0534	2.6000e-003	0.0560	0.0138	2.5800e-003	0.0164	0.0000	103.0184	103.0184	3.1900e-003	2.6000e-003	103.8733

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2042	0.1385	0.2089	0.4803	1.1500e-003	0.0395	2.6000e-003	0.0421	0.0105	2.5800e-003	0.0131	0.0000	103.0183	103.0183	3.1900e-003	2.6000e-003	103.8732
Maximum	0.1385	0.2089	0.4803	1.1500e-003	0.0395	2.6000e-003	0.0421	0.0105	2.5800e-003	0.0131	0.0000	103.0183	103.0183	3.1900e-003	2.6000e-003	103.8732

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	25.95	0.00	24.74	24.11	0.00	20.37	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

1	2-3-2042	5-2-2042	0.1317	0.1317
2	5-3-2042	8-2-2042	0.2113	0.2113
		Highest	0.2113	0.2113

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/3/2042	2/14/2042	5	10	
2	Site Preparation	Site Preparation	2/15/2042	2/17/2042	5	1	
3	Grading	Grading	2/18/2042	2/19/2042	5	2	
4	Building Construction	Building Construction	2/20/2042	7/9/2042	5	100	
5	Paving	Paving	7/10/2042	7/16/2042	5	5	
6	Architectural Coating	Architectural Coating	7/17/2042	7/23/2042	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 163,131; Non-Residential Outdoor: 54,377; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	46.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	2.1500e-003	0.0000	2.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-003	0.0154	0.0370	7.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	5.6973	5.6973	2.0000e-004	0.0000	5.7022

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	2.5000e-003	0.0154	0.0370	7.0000e-005	0.0142	1.8000e-004	0.0144	2.1500e-003	1.8000e-004	2.3300e-003	0.0000	5.6973	5.6973	2.0000e-004	0.0000	5.7022
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	7.0100e-003	2.1900e-003	3.0000e-005	1.1400e-003	7.0000e-005	1.2000e-003	3.1000e-004	7.0000e-005	3.8000e-004	0.0000	2.7550	2.7550	1.0000e-004	4.4000e-004	2.8875
Vendor	2.0000e-005	7.0000e-004	2.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	4.0000e-005	0.2851
Worker	6.0000e-005	4.0000e-005	8.4000e-004	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.3410	0.3410	0.0000	1.0000e-005	0.3430
<b>Total</b>	<b>2.2000e-004</b>	<b>7.7500e-003</b>	<b>3.3000e-003</b>	<b>3.0000e-005</b>	<b>1.8200e-003</b>	<b>7.0000e-005</b>	<b>1.8800e-003</b>	<b>5.0000e-004</b>	<b>7.0000e-005</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>3.3690</b>	<b>3.3690</b>	<b>1.1000e-004</b>	<b>4.9000e-004</b>	<b>3.5156</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0700e-003	0.0000	6.0700e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-003	0.0154	0.0370	7.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	5.6973	5.6973	2.0000e-004	0.0000	5.7022
<b>Total</b>	<b>2.5000e-003</b>	<b>0.0154</b>	<b>0.0370</b>	<b>7.0000e-005</b>	<b>6.0700e-003</b>	<b>1.8000e-004</b>	<b>6.2500e-003</b>	<b>9.2000e-004</b>	<b>1.8000e-004</b>	<b>1.1000e-003</b>	<b>0.0000</b>	<b>5.6973</b>	<b>5.6973</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>5.7022</b>

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	7.0100e-003	2.1900e-003	3.0000e-005	1.0600e-003	7.0000e-005	1.1300e-003	2.9000e-004	7.0000e-005	3.6000e-004	0.0000	2.7550	2.7550	1.0000e-004	4.4000e-004	2.8875
Vendor	2.0000e-005	7.0000e-004	2.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	4.0000e-005	0.2851
Worker	6.0000e-005	4.0000e-005	8.4000e-004	0.0000	5.1000e-004	0.0000	5.1000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3410	0.3410	0.0000	1.0000e-005	0.3430
<b>Total</b>	<b>2.2000e-004</b>	<b>7.7500e-003</b>	<b>3.3000e-003</b>	<b>3.0000e-005</b>	<b>1.6900e-003</b>	<b>7.0000e-005</b>	<b>1.7600e-003</b>	<b>4.6000e-004</b>	<b>7.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>3.3690</b>	<b>3.3690</b>	<b>1.1000e-004</b>	<b>4.9000e-004</b>	<b>3.5156</b>

**3.3 Site Preparation - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.1000e-004	1.9400e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
<b>Total</b>	<b>2.1000e-004</b>	<b>7.1000e-004</b>	<b>1.9400e-003</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>1.0000e-005</b>	<b>2.8000e-004</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.5117</b>	<b>0.5117</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5122</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0137	0.0137	0.0000	0.0000	0.0143
Worker	0.0000	0.0000	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0171	0.0171	0.0000	0.0000	0.0172
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0307</b>	<b>0.0307</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0314</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-004	0.0000	1.1000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	7.1000e-004	1.9400e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5117	0.5117	2.0000e-005	0.0000	0.5122
<b>Total</b>	<b>2.1000e-004</b>	<b>7.1000e-004</b>	<b>1.9400e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>1.0000e-005</b>	<b>1.2000e-004</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5117</b>	<b>0.5117</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5122</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0137	0.0137	0.0000	0.0000	0.0143

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0000	0.0000	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0171	0.0171	0.0000	0.0000	0.0172
<b>Total</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0307</b>	<b>0.0307</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0314</b>

**3.4 Grading - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	2.2500e-003	4.8000e-003	2.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.4822	1.4822	5.0000e-005	0.0000	1.4835
<b>Total</b>	<b>6.6000e-004</b>	<b>2.2500e-003</b>	<b>4.8000e-003</b>	<b>2.0000e-005</b>	<b>5.3100e-003</b>	<b>6.0000e-005</b>	<b>5.3700e-003</b>	<b>2.5700e-003</b>	<b>6.0000e-005</b>	<b>2.6300e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.4835</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0546	0.0546	0.0000	1.0000e-005	0.0570
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0546	0.0546	0.0000	0.0000	0.0549
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1119</b>



Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	1.1000e-003	0.0000	1.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	2.2500e-003	4.8000e-003	2.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.4822	1.4822	5.0000e-005	0.0000	1.4835
<b>Total</b>	<b>6.6000e-004</b>	<b>2.2500e-003</b>	<b>4.8000e-003</b>	<b>2.0000e-005</b>	<b>2.2700e-003</b>	<b>6.0000e-005</b>	<b>2.3300e-003</b>	<b>1.1000e-003</b>	<b>6.0000e-005</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>1.4822</b>	<b>1.4822</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.4835</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0546	0.0546	0.0000	1.0000e-005	0.0570
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0546	0.0546	0.0000	0.0000	0.0549
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1119</b>

**3.5 Building Construction - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	tons/yr										MT/yr					
Off-Road	0.0283	0.1393	0.3575	7.0000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	60.0010	60.0010	2.2300e-003	0.0000	60.0568
<b>Total</b>	<b>0.0283</b>	<b>0.1393</b>	<b>0.3575</b>	<b>7.0000e-004</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>60.0010</b>	<b>60.0010</b>	<b>2.2300e-003</b>	<b>0.0000</b>	<b>60.0568</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0316	0.0123	1.3000e-004	5.6800e-003	2.2000e-004	5.8900e-003	1.6400e-003	2.1000e-004	1.8500e-003	0.0000	12.2843	12.2843	2.7000e-004	1.8000e-003	12.8276
Worker	2.9700e-003	1.9600e-003	0.0389	1.5000e-004	0.0252	5.0000e-005	0.0253	6.7000e-003	5.0000e-005	6.7400e-003	0.0000	15.6861	15.6861	1.5000e-004	3.0000e-004	15.7789
<b>Total</b>	<b>3.8600e-003</b>	<b>0.0336</b>	<b>0.0512</b>	<b>2.8000e-004</b>	<b>0.0309</b>	<b>2.7000e-004</b>	<b>0.0312</b>	<b>8.3400e-003</b>	<b>2.6000e-004</b>	<b>8.5900e-003</b>	<b>0.0000</b>	<b>27.9703</b>	<b>27.9703</b>	<b>4.2000e-004</b>	<b>2.1000e-003</b>	<b>28.6064</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0283	0.1393	0.3575	7.0000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	60.0009	60.0009	2.2300e-003	0.0000	60.0567
<b>Total</b>	<b>0.0283</b>	<b>0.1393</b>	<b>0.3575</b>	<b>7.0000e-004</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>60.0009</b>	<b>60.0009</b>	<b>2.2300e-003</b>	<b>0.0000</b>	<b>60.0567</b>

**Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0316	0.0123	1.3000e-004	5.3100e-003	2.2000e-004	5.5300e-003	1.5500e-003	2.1000e-004	1.7600e-003	0.0000	12.2843	12.2843	2.7000e-004	1.8000e-003	12.8276
Worker	2.9700e-003	1.9600e-003	0.0389	1.5000e-004	0.0233	5.0000e-005	0.0233	6.2100e-003	5.0000e-005	6.2600e-003	0.0000	15.6861	15.6861	1.5000e-004	3.0000e-004	15.7789
<b>Total</b>	<b>3.8600e-003</b>	<b>0.0336</b>	<b>0.0512</b>	<b>2.8000e-004</b>	<b>0.0286</b>	<b>2.7000e-004</b>	<b>0.0288</b>	<b>7.7600e-003</b>	<b>2.6000e-004</b>	<b>8.0200e-003</b>	<b>0.0000</b>	<b>27.9703</b>	<b>27.9703</b>	<b>4.2000e-004</b>	<b>2.1000e-003</b>	<b>28.6064</b>

**3.6 Paving - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5200e-003	7.8300e-003	0.0187	3.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.7483	2.7483	1.2000e-004	0.0000	2.7513
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.5200e-003</b>	<b>7.8300e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.7513</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	7.6000e-004	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3069	0.3069	0.0000	1.0000e-005	0.3087
<b>Total</b>	<b>6.0000e-005</b>	<b>4.0000e-005</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3069</b>	<b>0.3069</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.3087</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5200e-003	7.8300e-003	0.0187	3.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.7483	2.7483	1.2000e-004	0.0000	2.7513
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.5200e-003</b>	<b>7.8300e-003</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.7483</b>	<b>2.7483</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.7513</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	6.0000e-005	4.0000e-005	7.6000e-004	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3069	0.3069	0.0000	1.0000e-005	0.3087
<b>Total</b>	<b>6.0000e-005</b>	<b>4.0000e-005</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>4.6000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3069</b>	<b>0.3069</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.3087</b>

**3.7 Architectural Coating - 2042**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1008					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8200e-003	4.4800e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.1011</b>	<b>1.8200e-003</b>	<b>4.4800e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1535	0.1535	0.0000	0.0000	0.1544
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>2.5000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1535</b>	<b>0.1535</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1544</b>

Construction Phase 4 Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1008					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8200e-003	4.4800e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.6383	0.6383	2.0000e-005	0.0000	0.6389
<b>Total</b>	<b>0.1011</b>	<b>1.8200e-003</b>	<b>4.4800e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.8000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1535	0.1535	0.0000	0.0000	0.1544
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.3000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1535</b>	<b>0.1535</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1544</b>

**Construction Phase 4 Mitigated**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	7	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	2.90000E-004	1.82000E-003	4.48000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38880E-001

**Construction Phase 4 Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Cement and Mortar	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Mixers												
Concrete/Industrial	1.02000E-003	7.48000E-003	1.81300E-002	3.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	2.68828E+000	2.68828E+000	8.00000E-005	0.00000E+000	2.69029E+000
Saws												
Cranes	5.76000E-003	1.01600E-002	3.37900E-002	1.80000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.60000E-004	0.00000E+000	1.52395E+001
Forklifts	6.50000E-003	3.51100E-002	8.93300E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Graders	3.20000E-004	6.10000E-004	1.92000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	4.50000E-004	1.23000E-003	6.99000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08693E+000
Rollers	2.80000E-004	1.79000E-003	4.25000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05230E-001
Rubber Tired Dozers	6.10000E-004	1.94000E-003	2.94000E-003	1.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	1.23525E+000	1.23525E+000	5.00000E-005	0.00000E+000	1.23645E+000
Tractors/Loaders/Bulldozers	1.78600E-002	1.04400E-001	2.60330E-001	4.20000E-004	1.12000E-003	1.12000E-003	0.00000E+000	3.62441E+001	3.62441E+001	1.40000E-003	0.00000E+000	3.62792E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr						Mitigated mt/yr						
Air Compressors	2.90000E-004	1.82000E-003	4.48000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.38310E-001	6.38310E-001	2.00000E-005	0.00000E+000	6.38870E-001
Cement and Mortar	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Mixers												
Concrete/Industrial	1.02000E-003	7.48000E-003	1.81300E-002	3.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	2.68828E+000	2.68828E+000	8.00000E-005	0.00000E+000	2.69029E+000
Saws												
Cranes	5.76000E-003	1.01600E-002	3.37900E-002	1.80000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.52281E+001	1.52281E+001	4.60000E-004	0.00000E+000	1.52395E+001
Forklifts	6.50000E-003	3.51100E-002	8.93300E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Graders	3.20000E-004	6.10000E-004	1.92000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	8.71430E-001	8.71430E-001	3.00000E-005	0.00000E+000	8.72080E-001
Pavers	4.50000E-004	1.23000E-003	6.99000E-003	1.00000E-005	6.00000E-005	6.00000E-005	0.00000E+000	1.08602E+000	1.08602E+000	4.00000E-005	0.00000E+000	1.08693E+000
Rollers	2.80000E-004	1.79000E-003	4.25000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	6.04670E-001	6.04670E-001	2.00000E-005	0.00000E+000	6.05230E-001
Rubber Tired Dozers	6.10000E-004	1.94000E-003	2.94000E-003	1.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	1.23525E+000	1.23525E+000	5.00000E-005	0.00000E+000	1.23645E+000
Tractors/Loaders/Bulldozers	1.78600E-002	1.04400E-001	2.60330E-001	4.20000E-004	1.12000E-003	1.12000E-003	0.00000E+000	3.62441E+001	3.62441E+001	1.40000E-003	0.00000E+000	3.62792E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.56524E-005
Cement and Mortar	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Mixers												
Concrete/Industrial	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Saws												
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31336E-006	1.31336E-006	0.00000E+000	0.00000E+000	1.31238E-006



**Construction Phase 4 Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64760E-006	1.64760E-006	0.00000E+000	0.00000E+000	8.22931E-007
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Bac khnes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10363E-006	1.10363E-006	0.00000E+000	0.00000E+000	1.37820E-006

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00
Yes	Clean Paved Road	% PM Reduction	9.00	Frequency (per day)	2.00

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.08	0.14
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.03	0.01	0.03	0.01	0.08	0.07
Demolition	Fugitive Dust	0.01	0.00	0.01	0.00	0.57	0.57
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.08
Grading	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.17	0.00

**Construction Phase 4 Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.59	0.67
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

# CalEEMod Output: Phase 5 Construction

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Construction Phase 5 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 5**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	158.67	1000sqft	1.52	158,666.00	0
Other Non-Asphalt Surfaces	687.07	1000sqft	15.77	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050

**Utility Company**

<b>CO2 Intensity (lb/MWhr)</b>	0	<b>CH4 Intensity (lb/MWhr)</b>	0	<b>N2O Intensity (lb/MWhr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information provided by the College District.

Trips and VMT - See Construction Phase 5 assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	687,073.00	0.00
tblLandUse	LotAcreage	3.64	1.52
tblTripsAndVMT	HaulingTripNumber	362.00	364.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00

Construction Phase 5 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	2.7656	8.2746	22.9024	0.0736	19.9095	0.2293	20.1143	10.1706	0.2291	10.3753	0.0000	7,609.3956	7,609.3956	0.2434	0.1404	7,626.5556
2050	73.6720	7.8087	17.7061	0.0392	0.9155	0.1167	0.9966	0.2466	0.1167	0.3274	0.0000	3,813.4276	3,813.4276	0.1160	0.0646	3,835.5850
<b>Maximum</b>	<b>73.6720</b>	<b>8.2746</b>	<b>22.9024</b>	<b>0.0736</b>	<b>19.9095</b>	<b>0.2293</b>	<b>20.1143</b>	<b>10.1706</b>	<b>0.2291</b>	<b>10.3753</b>	<b>0.0000</b>	<b>7,609.3956</b>	<b>7,609.3956</b>	<b>0.2434</b>	<b>0.1404</b>	<b>7,626.5556</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	2.7656	8.2746	22.9024	0.0736	8.6368	0.2293	8.8416	4.3822	0.2291	4.5870	0.0000	7,609.3956	7,609.3956	0.2434	0.1404	7,626.5556
2050	73.6720	7.8087	17.7061	0.0392	0.8462	0.1167	0.9274	0.2296	0.1167	0.3104	0.0000	3,813.4276	3,813.4276	0.1160	0.0646	3,835.5850
<b>Maximum</b>	<b>73.6720</b>	<b>8.2746</b>	<b>22.9024</b>	<b>0.0736</b>	<b>8.6368</b>	<b>0.2293</b>	<b>8.8416</b>	<b>4.3822</b>	<b>0.2291</b>	<b>4.5870</b>	<b>0.0000</b>	<b>7,609.3956</b>	<b>7,609.3956</b>	<b>0.2434</b>	<b>0.1404</b>	<b>7,626.5556</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>54.46</b>	<b>0.00</b>	<b>53.73</b>	<b>55.73</b>	<b>0.00</b>	<b>54.24</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction Phase 5 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2049	1/28/2049	5	20	
2	Site Preparation	Site Preparation	1/29/2049	2/11/2049	5	10	
3	Grading	Grading	2/12/2049	3/25/2049	5	30	
4	Building Construction	Building Construction	3/26/2049	5/19/2050	5	300	
5	Paving	Paving	5/20/2050	6/16/2050	5	20	
6	Architectural Coating	Architectural Coating	6/17/2050	7/14/2050	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 15.77

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 237,999; Non-Residential Outdoor: 79,333; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Scrapers	2	8.00	367	0.48

Construction Phase 5 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	364.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	67.00	26.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9203	0.0000	3.9203	0.5936	0.0000	0.5936			0.0000			0.0000
Off-Road	1.6982	5.3064	18.5788	0.0462		0.1629	0.1629		0.1629	0.1629		4,378.5819	4,378.5819	0.1484		4,382.2921
<b>Total</b>	<b>1.6982</b>	<b>5.3064</b>	<b>18.5788</b>	<b>0.0462</b>	<b>3.9203</b>	<b>0.1629</b>	<b>4.0832</b>	<b>0.5936</b>	<b>0.1629</b>	<b>0.7565</b>		<b>4,378.5819</b>	<b>4,378.5819</b>	<b>0.1484</b>		<b>4,382.2921</b>



**Construction Phase 5 - San Bernardino-South Coast County, Summer  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0412	1.8282	0.5988	7.5800e-003	0.3187	0.0189	0.3375	0.0874	0.0181	0.1054		820.1031	820.1031	0.0296	0.1297	859.5043
Vendor	4.1400e-003	0.1335	0.0540	5.5000e-004	0.0256	9.6000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		58.9269	58.9269	1.2800e-003	8.6300e-003	61.5304
Worker	0.0187	0.0111	0.2805	1.0600e-003	0.1677	2.8000e-004	0.1680	0.0445	2.6000e-004	0.0447		120.4346	120.4346	9.2000e-004	1.9900e-003	121.0498
<b>Total</b>	<b>0.0641</b>	<b>1.9728</b>	<b>0.9333</b>	<b>9.1900e-003</b>	<b>0.5119</b>	<b>0.0201</b>	<b>0.5321</b>	<b>0.1392</b>	<b>0.0193</b>	<b>0.1585</b>		<b>999.4646</b>	<b>999.4646</b>	<b>0.0318</b>	<b>0.1404</b>	<b>1,042.0845</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6759	0.0000	1.6759	0.2538	0.0000	0.2538			0.0000			0.0000
Off-Road	1.6982	5.3064	18.5788	0.0462		0.1629	0.1629		0.1629	0.1629	0.0000	4,378.5819	4,378.5819	0.1484		4,382.2920
<b>Total</b>	<b>1.6982</b>	<b>5.3064</b>	<b>18.5788</b>	<b>0.0462</b>	<b>1.6759</b>	<b>0.1629</b>	<b>1.8388</b>	<b>0.2538</b>	<b>0.1629</b>	<b>0.4166</b>	<b>0.0000</b>	<b>4,378.5819</b>	<b>4,378.5819</b>	<b>0.1484</b>		<b>4,382.2920</b>

**Mitigated Construction Off-Site**

Construction Phase 5 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0412	1.8282	0.5988	7.5800e-003	0.2970	0.0189	0.3159	0.0821	0.0181	0.1001		820.1031	820.1031	0.0296	0.1297	859.5043
Vendor	4.1400e-003	0.1335	0.0540	5.5000e-004	0.0240	9.6000e-004	0.0249	6.9800e-003	9.2000e-004	7.9000e-003		58.9269	58.9269	1.2800e-003	8.6300e-003	61.5304
Worker	0.0187	0.0111	0.2805	1.0600e-003	0.1546	2.8000e-004	0.1548	0.0413	2.6000e-004	0.0415		120.4346	120.4346	9.2000e-004	1.9900e-003	121.0498
<b>Total</b>	<b>0.0641</b>	<b>1.9728</b>	<b>0.9333</b>	<b>9.1900e-003</b>	<b>0.4755</b>	<b>0.0201</b>	<b>0.4957</b>	<b>0.1303</b>	<b>0.0193</b>	<b>0.1495</b>		<b>999.4646</b>	<b>999.4646</b>	<b>0.0318</b>	<b>0.1404</b>	<b>1,042.0845</b>

**3.3 Site Preparation - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026		4,409.7537	4,409.7537	0.1707		4,414.0214
<b>Total</b>	<b>1.9657</b>	<b>7.9943</b>	<b>15.7797</b>	<b>0.0466</b>	<b>19.6570</b>	<b>0.2026</b>	<b>19.8596</b>	<b>10.1025</b>	<b>0.2026</b>	<b>10.3050</b>		<b>4,409.7537</b>	<b>4,409.7537</b>	<b>0.1707</b>		<b>4,414.0214</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 5 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2900e-003	0.2670	0.1081	1.1000e-003	0.0513	1.9200e-003	0.0532	0.0148	1.8400e-003	0.0166		117.8538	117.8538	2.5700e-003	0.0173	123.0608
Worker	0.0225	0.0133	0.3366	1.2700e-003	0.2012	3.4000e-004	0.2015	0.0534	3.1000e-004	0.0537		144.5215	144.5215	1.1000e-003	2.3800e-003	145.2598
<b>Total</b>	<b>0.0307</b>	<b>0.2803</b>	<b>0.4447</b>	<b>2.3700e-003</b>	<b>0.2525</b>	<b>2.2600e-003</b>	<b>0.2547</b>	<b>0.0681</b>	<b>2.1500e-003</b>	<b>0.0703</b>		<b>262.3753</b>	<b>262.3753</b>	<b>3.6700e-003</b>	<b>0.0196</b>	<b>268.3206</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026	0.0000	4,409.7537	4,409.7537	0.1707		4,414.0214
<b>Total</b>	<b>1.9657</b>	<b>7.9943</b>	<b>15.7797</b>	<b>0.0466</b>	<b>8.4034</b>	<b>0.2026</b>	<b>8.6059</b>	<b>4.3188</b>	<b>0.2026</b>	<b>4.5214</b>	<b>0.0000</b>	<b>4,409.7537</b>	<b>4,409.7537</b>	<b>0.1707</b>		<b>4,414.0214</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2900e-003	0.2670	0.1081	1.1000e-003	0.0480	1.9200e-003	0.0499	0.0140	1.8400e-003	0.0158		117.8538	117.8538	2.5700e-003	0.0173	123.0608
Worker	0.0225	0.0133	0.3366	1.2700e-003	0.1855	3.4000e-004	0.1858	0.0495	3.1000e-004	0.0498		144.5215	144.5215	1.1000e-003	2.3800e-003	145.2598

Construction Phase 5 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.0307	0.2803	0.4447	2.3700e-003	0.2334	2.2600e-003	0.2357	0.0634	2.1500e-003	0.0656		262.3753	262.3753	3.6700e-003	0.0196	268.3206
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3.4 Grading - 2049

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.7241	7.3885	22.3122	0.0699		0.2250	0.2250		0.2250	0.2250		7,213.1086	7,213.1086	0.2370		7,219.0343
Total	2.7241	7.3885	22.3122	0.0699	9.2036	0.2250	9.4286	3.6538	0.2250	3.8788		7,213.1086	7,213.1086	0.2370		7,219.0343

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0166	0.5339	0.2162	2.2100e-003	0.1025	3.8500e-003	0.1064	0.0295	3.6800e-003	0.0332		235.7076	235.7076	5.1400e-003	0.0345	246.1216
Worker	0.0249	0.0148	0.3740	1.4100e-003	0.2236	3.8000e-004	0.2239	0.0593	3.5000e-004	0.0596		160.5795	160.5795	1.2300e-003	2.6500e-003	161.3998
Total	0.0415	0.5488	0.5902	3.6200e-003	0.3261	4.2300e-003	0.3303	0.0888	4.0300e-003	0.0928		396.2871	396.2871	6.3700e-003	0.0372	407.5214

Construction Phase 5 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9345	0.0000	3.9345	1.5620	0.0000	1.5620			0.0000			0.0000
Off-Road	2.7241	7.3885	22.3122	0.0699		0.2250	0.2250		0.2250	0.2250	0.0000	7,213.1086	7,213.1086	0.2370		7,219.0343
<b>Total</b>	<b>2.7241</b>	<b>7.3885</b>	<b>22.3122</b>	<b>0.0699</b>	<b>3.9345</b>	<b>0.2250</b>	<b>4.1596</b>	<b>1.5620</b>	<b>0.2250</b>	<b>1.7870</b>	<b>0.0000</b>	<b>7,213.1086</b>	<b>7,213.1086</b>	<b>0.2370</b>		<b>7,219.0343</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0166	0.5339	0.2162	2.2100e-003	0.0959	3.8500e-003	0.0998	0.0279	3.6800e-003	0.0316		235.7076	235.7076	5.1400e-003	0.0345	246.1216
Worker	0.0249	0.0148	0.3740	1.4100e-003	0.2061	3.8000e-004	0.2064	0.0550	3.5000e-004	0.0553		160.5795	160.5795	1.2300e-003	2.6500e-003	161.3998
<b>Total</b>	<b>0.0415</b>	<b>0.5488</b>	<b>0.5902</b>	<b>3.6200e-003</b>	<b>0.3020</b>	<b>4.2300e-003</b>	<b>0.3062</b>	<b>0.0829</b>	<b>4.0300e-003</b>	<b>0.0869</b>		<b>396.2871</b>	<b>396.2871</b>	<b>6.3700e-003</b>	<b>0.0372</b>	<b>407.5214</b>

**3.5 Building Construction - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737		2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>		<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0269	0.8677	0.3513	3.5900e-003	0.1666	6.2500e-003	0.1728	0.0480	5.9800e-003	0.0539		383.0248	383.0248	8.3500e-003	0.0561	399.9476
Worker	0.0836	0.0497	1.2530	4.7400e-003	0.7489	1.2700e-003	0.7502	0.1986	1.1700e-003	0.1998		537.9412	537.9412	4.1100e-003	8.8800e-003	540.6892
<b>Total</b>	<b>0.1105</b>	<b>0.9173</b>	<b>1.6042</b>	<b>8.3300e-003</b>	<b>0.9155</b>	<b>7.5200e-003</b>	<b>0.9230</b>	<b>0.2466</b>	<b>7.1500e-003</b>	<b>0.2537</b>		<b>920.9660</b>	<b>920.9660</b>	<b>0.0125</b>	<b>0.0650</b>	<b>940.6368</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737	0.0000	2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>	<b>0.0000</b>	<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

**Construction Phase 5 - San Bernardino-South Coast County, Summer**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0269	0.8677	0.3513	3.5900e-003	0.1559	6.2500e-003	0.1621	0.0453	5.9800e-003	0.0513		383.0248	383.0248	8.3500e-003	0.0561	399.9476
Worker	0.0836	0.0497	1.2530	4.7400e-003	0.6903	1.2700e-003	0.6916	0.1842	1.1700e-003	0.1854		537.9412	537.9412	4.1100e-003	8.8800e-003	540.6892
<b>Total</b>	<b>0.1105</b>	<b>0.9173</b>	<b>1.6042</b>	<b>8.3300e-003</b>	<b>0.8462</b>	<b>7.5200e-003</b>	<b>0.8537</b>	<b>0.2296</b>	<b>7.1500e-003</b>	<b>0.2367</b>		<b>920.9660</b>	<b>920.9660</b>	<b>0.0125</b>	<b>0.0650</b>	<b>940.6368</b>

**3.5 Building Construction - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737		2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>		<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0269	0.8689	0.3480	3.5700e-003	0.1666	6.2400e-003	0.1728	0.0480	5.9700e-003	0.0539	380.7191	380.7191	7.8800e-003	0.0558	397.5350	
Worker	0.0795	0.0495	1.2397	4.7000e-003	0.7489	1.2100e-003	0.7501	0.1986	1.1100e-003	0.1997	535.1615	535.1615	3.9500e-003	8.8600e-003	537.8996	
<b>Total</b>	<b>0.1063</b>	<b>0.9184</b>	<b>1.5877</b>	<b>8.2700e-003</b>	<b>0.9155</b>	<b>7.4500e-003</b>	<b>0.9229</b>	<b>0.2466</b>	<b>7.0800e-003</b>	<b>0.2537</b>	<b>915.8805</b>	<b>915.8805</b>	<b>0.0118</b>	<b>0.0646</b>	<b>935.4347</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737	0.0000	2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>	<b>0.0000</b>	<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0269	0.8689	0.3480	3.5700e-003	0.1559	6.2400e-003	0.1621	0.0453	5.9700e-003	0.0513		380.7191	380.7191	7.8800e-003	0.0558	397.5350
Worker	0.0795	0.0495	1.2397	4.7000e-003	0.6903	1.2100e-003	0.6915	0.1842	1.1100e-003	0.1853		535.1615	535.1615	3.9500e-003	8.8600e-003	537.8996



Construction Phase 5 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1063	0.9184	1.5877	8.2700e-003	0.8462	7.4500e-003	0.8536	0.2296	7.0800e-003	0.2367		915.8805	915.8805	0.0118	0.0646	935.4347
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3.6 Paving - 2050

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0112	3.6566	15.8177	0.0281		0.1164	0.1164		0.1164	0.1164		2,656.5168	2,656.5168	0.0893		2,658.7489
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0112	3.6566	15.8177	0.0281		0.1164	0.1164		0.1164	0.1164		2,656.5168	2,656.5168	0.0893		2,658.7489

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0178	0.0111	0.2775	1.0500e-003	0.1677	2.7000e-004	0.1679	0.0445	2.5000e-004	0.0447		119.8123	119.8123	8.8000e-004	1.9800e-003	120.4253
Total	0.0178	0.0111	0.2775	1.0500e-003	0.1677	2.7000e-004	0.1679	0.0445	2.5000e-004	0.0447		119.8123	119.8123	8.8000e-004	1.9800e-003	120.4253

Construction Phase 5 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0112	3.6566	15.8177	0.0281		0.1164	0.1164		0.1164	0.1164	0.0000	2,656.5168	2,656.5168	0.0893		2,658.7489
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0112</b>	<b>3.6566</b>	<b>15.8177</b>	<b>0.0281</b>		<b>0.1164</b>	<b>0.1164</b>		<b>0.1164</b>	<b>0.1164</b>	<b>0.0000</b>	<b>2,656.5168</b>	<b>2,656.5168</b>	<b>0.0893</b>		<b>2,658.7489</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0178	0.0111	0.2775	1.0500e-003	0.1546	2.7000e-004	0.1548	0.0413	2.5000e-004	0.0415		119.8123	119.8123	8.8000e-004	1.9800e-003	120.4253
<b>Total</b>	<b>0.0178</b>	<b>0.0111</b>	<b>0.2775</b>	<b>1.0500e-003</b>	<b>0.1546</b>	<b>2.7000e-004</b>	<b>0.1548</b>	<b>0.0413</b>	<b>2.5000e-004</b>	<b>0.0415</b>		<b>119.8123</b>	<b>119.8123</b>	<b>8.8000e-004</b>	<b>1.9800e-003</b>	<b>120.4253</b>

**3.7 Architectural Coating - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day				
Archit. Coating	73.5417					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003	281.6957
<b>Total</b>	<b>73.6566</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>	<b>281.6957</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6000e-003	0.2405	9.1000e-004	0.1453	2.3000e-004	0.1455	0.0385	2.2000e-004	0.0388		103.8373	103.8373	7.7000e-004	1.7200e-003	104.3686
<b>Total</b>	<b>0.0154</b>	<b>9.6000e-003</b>	<b>0.2405</b>	<b>9.1000e-004</b>	<b>0.1453</b>	<b>2.3000e-004</b>	<b>0.1455</b>	<b>0.0385</b>	<b>2.2000e-004</b>	<b>0.0388</b>		<b>103.8373</b>	<b>103.8373</b>	<b>7.7000e-004</b>	<b>1.7200e-003</b>	<b>104.3686</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	73.5417					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>73.6566</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Construction Phase 5 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6000e-003	0.2405	9.1000e-004	0.1339	2.3000e-004	0.1342	0.0358	2.2000e-004	0.0360		103.8373	103.8373	7.7000e-004	1.7200e-003	104.3686
<b>Total</b>	<b>0.0154</b>	<b>9.6000e-003</b>	<b>0.2405</b>	<b>9.1000e-004</b>	<b>0.1339</b>	<b>2.3000e-004</b>	<b>0.1342</b>	<b>0.0358</b>	<b>2.2000e-004</b>	<b>0.0360</b>		<b>103.8373</b>	<b>103.8373</b>	<b>7.7000e-004</b>	<b>1.7200e-003</b>	<b>104.3686</b>

Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction Phase 5**  
San Bernardino-South Coast County, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	158.67	1000sqft	1.52	158,666.00	0
Other Non-Asphalt Surfaces	687.07	1000sqft	15.77	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information provided by the College District.

Trips and VMT - See Construction Phase 5 assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	687,073.00	0.00
tblLandUse	LotAcreage	3.64	1.52
tblTripsAndVMT	HaulingTripNumber	362.00	364.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00

Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	2.7645	8.2907	22.8447	0.0734	19.9095	0.2293	20.1143	10.1706	0.2291	10.3753	0.0000	7,595.0618	7,595.0618	0.2434	0.1407	7,612.2779
2050	73.6723	7.8612	17.5025	0.0388	0.9155	0.1167	0.9967	0.2466	0.1167	0.3274	0.0000	3,764.5815	3,764.5815	0.1160	0.0651	3,786.8719
<b>Maximum</b>	<b>73.6723</b>	<b>8.2907</b>	<b>22.8447</b>	<b>0.0734</b>	<b>19.9095</b>	<b>0.2293</b>	<b>20.1143</b>	<b>10.1706</b>	<b>0.2291</b>	<b>10.3753</b>	<b>0.0000</b>	<b>7,595.0618</b>	<b>7,595.0618</b>	<b>0.2434</b>	<b>0.1407</b>	<b>7,612.2779</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	2.7645	8.2907	22.8447	0.0734	8.6368	0.2293	8.8416	4.3822	0.2291	4.5870	0.0000	7,595.0618	7,595.0618	0.2434	0.1407	7,612.2779
2050	73.6723	7.8612	17.5025	0.0388	0.8462	0.1167	0.9274	0.2296	0.1167	0.3104	0.0000	3,764.5815	3,764.5815	0.1160	0.0651	3,786.8719
<b>Maximum</b>	<b>73.6723</b>	<b>8.2907</b>	<b>22.8447</b>	<b>0.0734</b>	<b>8.6368</b>	<b>0.2293</b>	<b>8.8416</b>	<b>4.3822</b>	<b>0.2291</b>	<b>4.5870</b>	<b>0.0000</b>	<b>7,595.0618</b>	<b>7,595.0618</b>	<b>0.2434</b>	<b>0.1407</b>	<b>7,612.2779</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>54.46</b>	<b>0.00</b>	<b>53.73</b>	<b>55.73</b>	<b>0.00</b>	<b>54.24</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2049	1/28/2049	5	20	
2	Site Preparation	Site Preparation	1/29/2049	2/11/2049	5	10	
3	Grading	Grading	2/12/2049	3/25/2049	5	30	
4	Building Construction	Building Construction	3/26/2049	5/19/2050	5	300	
5	Paving	Paving	5/20/2050	6/16/2050	5	20	
6	Architectural Coating	Architectural Coating	6/17/2050	7/14/2050	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 15.77

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 237,999; Non-Residential Outdoor: 79,333; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Scrapers	2	8.00	367	0.48

Construction Phase 5 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	364.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	67.00	26.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9203	0.0000	3.9203	0.5936	0.0000	0.5936			0.0000			0.0000
Off-Road	1.6982	5.3064	18.5788	0.0462		0.1629	0.1629		0.1629	0.1629		4,378.5819	4,378.5819	0.1484		4,382.2921
<b>Total</b>	<b>1.6982</b>	<b>5.3064</b>	<b>18.5788</b>	<b>0.0462</b>	<b>3.9203</b>	<b>0.1629</b>	<b>4.0832</b>	<b>0.5936</b>	<b>0.1629</b>	<b>0.7565</b>		<b>4,378.5819</b>	<b>4,378.5819</b>	<b>0.1484</b>		<b>4,382.2921</b>



Construction Phase 5 - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.9297	0.6096	7.5900e-003	0.3187	0.0189	0.3376	0.0874	0.0181	0.1055		821.5031	821.5031	0.0295	0.1300	860.9664
Vendor	3.8000e-003	0.1412	0.0558	5.5000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		59.0860	59.0860	1.2700e-003	8.6600e-003	61.6975
Worker	0.0189	0.0116	0.2321	9.6000e-004	0.1677	2.8000e-004	0.1680	0.0445	2.6000e-004	0.0447		109.2070	109.2070	9.5000e-004	2.0500e-003	109.8403
<b>Total</b>	<b>0.0605</b>	<b>2.0825</b>	<b>0.8975</b>	<b>9.1000e-003</b>	<b>0.5119</b>	<b>0.0202</b>	<b>0.5321</b>	<b>0.1392</b>	<b>0.0193</b>	<b>0.1585</b>		<b>989.7961</b>	<b>989.7961</b>	<b>0.0317</b>	<b>0.1407</b>	<b>1,032.5041</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6759	0.0000	1.6759	0.2538	0.0000	0.2538			0.0000			0.0000
Off-Road	1.6982	5.3064	18.5788	0.0462		0.1629	0.1629		0.1629	0.1629	0.0000	4,378.5819	4,378.5819	0.1484		4,382.2920
<b>Total</b>	<b>1.6982</b>	<b>5.3064</b>	<b>18.5788</b>	<b>0.0462</b>	<b>1.6759</b>	<b>0.1629</b>	<b>1.8388</b>	<b>0.2538</b>	<b>0.1629</b>	<b>0.4166</b>	<b>0.0000</b>	<b>4,378.5819</b>	<b>4,378.5819</b>	<b>0.1484</b>		<b>4,382.2920</b>

**Mitigated Construction Off-Site**

Construction Phase 5 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.9297	0.6096	7.5900e-003	0.2970	0.0189	0.3159	0.0821	0.0181	0.1002		821.5031	821.5031	0.0295	0.1300	860.9664
Vendor	3.8000e-003	0.1412	0.0558	5.5000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.2000e-004	7.9000e-003		59.0860	59.0860	1.2700e-003	8.6600e-003	61.6975
Worker	0.0189	0.0116	0.2321	9.6000e-004	0.1546	2.8000e-004	0.1548	0.0413	2.6000e-004	0.0415		109.2070	109.2070	9.5000e-004	2.0500e-003	109.8403
<b>Total</b>	<b>0.0605</b>	<b>2.0825</b>	<b>0.8975</b>	<b>9.1000e-003</b>	<b>0.4755</b>	<b>0.0202</b>	<b>0.4957</b>	<b>0.1303</b>	<b>0.0193</b>	<b>0.1496</b>		<b>989.7961</b>	<b>989.7961</b>	<b>0.0317</b>	<b>0.1407</b>	<b>1,032.5041</b>

**3.3 Site Preparation - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026		4,409.7537	4,409.7537	0.1707		4,414.0214
<b>Total</b>	<b>1.9657</b>	<b>7.9943</b>	<b>15.7797</b>	<b>0.0466</b>	<b>19.6570</b>	<b>0.2026</b>	<b>19.8596</b>	<b>10.1025</b>	<b>0.2026</b>	<b>10.3050</b>		<b>4,409.7537</b>	<b>4,409.7537</b>	<b>0.1707</b>		<b>4,414.0214</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 5 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-003	0.2824	0.1116	1.1100e-003	0.0513	1.9300e-003	0.0532	0.0148	1.8500e-003	0.0166		118.1719	118.1719	2.5300e-003	0.0173	123.3950
Worker	0.0227	0.0140	0.2785	1.1500e-003	0.2012	3.4000e-004	0.2015	0.0534	3.1000e-004	0.0537		131.0485	131.0485	1.1400e-003	2.4500e-003	131.8083
<b>Total</b>	<b>0.0303</b>	<b>0.2964</b>	<b>0.3900</b>	<b>2.2600e-003</b>	<b>0.2525</b>	<b>2.2700e-003</b>	<b>0.2547</b>	<b>0.0681</b>	<b>2.1600e-003</b>	<b>0.0703</b>		<b>249.2204</b>	<b>249.2204</b>	<b>3.6700e-003</b>	<b>0.0198</b>	<b>255.2033</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026	0.0000	4,409.7537	4,409.7537	0.1707		4,414.0214
<b>Total</b>	<b>1.9657</b>	<b>7.9943</b>	<b>15.7797</b>	<b>0.0466</b>	<b>8.4034</b>	<b>0.2026</b>	<b>8.6059</b>	<b>4.3188</b>	<b>0.2026</b>	<b>4.5214</b>	<b>0.0000</b>	<b>4,409.7537</b>	<b>4,409.7537</b>	<b>0.1707</b>		<b>4,414.0214</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-003	0.2824	0.1116	1.1100e-003	0.0480	1.9300e-003	0.0499	0.0140	1.8500e-003	0.0158		118.1719	118.1719	2.5300e-003	0.0173	123.3950
Worker	0.0227	0.0140	0.2785	1.1500e-003	0.1855	3.4000e-004	0.1858	0.0495	3.1000e-004	0.0498		131.0485	131.0485	1.1400e-003	2.4500e-003	131.8083

Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.0303	0.2964	0.3900	2.2600e-003	0.2334	2.2700e-003	0.2357	0.0634	2.1600e-003	0.0656		249.2204	249.2204	3.6700e-003	0.0198	255.2033
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3.4 Grading - 2049

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.7241	7.3885	22.3122	0.0699		0.2250	0.2250		0.2250	0.2250		7,213.1086	7,213.1086	0.2370		7,219.0343
<b>Total</b>	<b>2.7241</b>	<b>7.3885</b>	<b>22.3122</b>	<b>0.0699</b>	<b>9.2036</b>	<b>0.2250</b>	<b>9.4286</b>	<b>3.6538</b>	<b>0.2250</b>	<b>3.8788</b>		<b>7,213.1086</b>	<b>7,213.1086</b>	<b>0.2370</b>		<b>7,219.0343</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0152	0.5648	0.2231	2.2100e-003	0.1025	3.8600e-003	0.1064	0.0295	3.6900e-003	0.0332		236.3438	236.3438	5.0700e-003	0.0346	246.7900
Worker	0.0252	0.0155	0.3094	1.2800e-003	0.2236	3.8000e-004	0.2239	0.0593	3.5000e-004	0.0596		145.6094	145.6094	1.2600e-003	2.7300e-003	146.4537
<b>Total</b>	<b>0.0404</b>	<b>0.5803</b>	<b>0.5326</b>	<b>3.4900e-003</b>	<b>0.3261</b>	<b>4.2400e-003</b>	<b>0.3303</b>	<b>0.0888</b>	<b>4.0400e-003</b>	<b>0.0929</b>		<b>381.9532</b>	<b>381.9532</b>	<b>6.3300e-003</b>	<b>0.0374</b>	<b>393.2437</b>

Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9345	0.0000	3.9345	1.5620	0.0000	1.5620			0.0000			0.0000
Off-Road	2.7241	7.3885	22.3122	0.0699		0.2250	0.2250		0.2250	0.2250	0.0000	7,213.1086	7,213.1086	0.2370		7,219.0343
<b>Total</b>	<b>2.7241</b>	<b>7.3885</b>	<b>22.3122</b>	<b>0.0699</b>	<b>3.9345</b>	<b>0.2250</b>	<b>4.1596</b>	<b>1.5620</b>	<b>0.2250</b>	<b>1.7870</b>	<b>0.0000</b>	<b>7,213.1086</b>	<b>7,213.1086</b>	<b>0.2370</b>		<b>7,219.0343</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0152	0.5648	0.2231	2.2100e-003	0.0959	3.8600e-003	0.0998	0.0279	3.6900e-003	0.0316		236.3438	236.3438	5.0700e-003	0.0346	246.7900
Worker	0.0252	0.0155	0.3094	1.2800e-003	0.2061	3.8000e-004	0.2064	0.0550	3.5000e-004	0.0553		145.6094	145.6094	1.2600e-003	2.7300e-003	146.4537
<b>Total</b>	<b>0.0404</b>	<b>0.5803</b>	<b>0.5326</b>	<b>3.4900e-003</b>	<b>0.3020</b>	<b>4.2400e-003</b>	<b>0.3062</b>	<b>0.0829</b>	<b>4.0400e-003</b>	<b>0.0869</b>		<b>381.9532</b>	<b>381.9532</b>	<b>6.3300e-003</b>	<b>0.0374</b>	<b>393.2437</b>

**3.5 Building Construction - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Construction Phase 5 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737		2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>		<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0247	0.9178	0.3626	3.6000e-003	0.1666	6.2700e-003	0.1728	0.0480	6.0000e-003	0.0540		384.0587	384.0587	8.2400e-003	0.0563	401.0337
Worker	0.0845	0.0520	1.0366	4.3000e-003	0.7489	1.2700e-003	0.7502	0.1986	1.1700e-003	0.1998		487.7914	487.7914	4.2300e-003	9.1400e-003	490.6199
<b>Total</b>	<b>0.1092</b>	<b>0.9697</b>	<b>1.3992</b>	<b>7.9000e-003</b>	<b>0.9155</b>	<b>7.5400e-003</b>	<b>0.9230</b>	<b>0.2466</b>	<b>7.1700e-003</b>	<b>0.2537</b>		<b>871.8501</b>	<b>871.8501</b>	<b>0.0125</b>	<b>0.0654</b>	<b>891.6536</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737	0.0000	2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>	<b>0.0000</b>	<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0247	0.9178	0.3626	3.6000e-003	0.1559	6.2700e-003	0.1622	0.0453	6.0000e-003	0.0513		384.0587	384.0587	8.2400e-003	0.0563	401.0337
Worker	0.0845	0.0520	1.0366	4.3000e-003	0.6903	1.2700e-003	0.6916	0.1842	1.1700e-003	0.1854		487.7914	487.7914	4.2300e-003	9.1400e-003	490.6199
<b>Total</b>	<b>0.1092</b>	<b>0.9697</b>	<b>1.3992</b>	<b>7.9000e-003</b>	<b>0.8462</b>	<b>7.5400e-003</b>	<b>0.8537</b>	<b>0.2296</b>	<b>7.1700e-003</b>	<b>0.2367</b>		<b>871.8501</b>	<b>871.8501</b>	<b>0.0125</b>	<b>0.0654</b>	<b>891.6536</b>

**3.5 Building Construction - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737		2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>		<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0247	0.9191	0.3591	3.5800e-003	0.1666	6.2600e-003	0.1728	0.0480	5.9900e-003	0.0540	381.7632	381.7632	7.7700e-003	0.0560	398.6322	
Worker	0.0808	0.0518	1.0249	4.2600e-003	0.7489	1.2100e-003	0.7501	0.1986	1.1100e-003	0.1997	485.2712	485.2712	4.0700e-003	9.1200e-003	488.0894	
<b>Total</b>	<b>0.1054</b>	<b>0.9709</b>	<b>1.3840</b>	<b>7.8400e-003</b>	<b>0.9155</b>	<b>7.4700e-003</b>	<b>0.9229</b>	<b>0.2466</b>	<b>7.1000e-003</b>	<b>0.2537</b>	<b>867.0344</b>	<b>867.0344</b>	<b>0.0118</b>	<b>0.0651</b>	<b>886.7216</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1970	6.8903	16.1185	0.0310		0.0737	0.0737		0.0737	0.0737	0.0000	2,897.5471	2,897.5471	0.1041		2,900.1503
<b>Total</b>	<b>1.1970</b>	<b>6.8903</b>	<b>16.1185</b>	<b>0.0310</b>		<b>0.0737</b>	<b>0.0737</b>		<b>0.0737</b>	<b>0.0737</b>	<b>0.0000</b>	<b>2,897.5471</b>	<b>2,897.5471</b>	<b>0.1041</b>		<b>2,900.1503</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0247	0.9191	0.3591	3.5800e-003	0.1559	6.2600e-003	0.1621	0.0453	5.9900e-003	0.0513		381.7632	381.7632	7.7700e-003	0.0560	398.6322
Worker	0.0808	0.0518	1.0249	4.2600e-003	0.6903	1.2100e-003	0.6915	0.1842	1.1100e-003	0.1853		485.2712	485.2712	4.0700e-003	9.1200e-003	488.0894



Construction Phase 5 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	0.1054	0.9709	1.3840	7.8400e-003	0.8462	7.4700e-003	0.8537	0.2296	7.1000e-003	0.2367		867.0344	867.0344	0.0118	0.0651	886.7216
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**3.6 Paving - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0112	3.6566	15.8177	0.0281		0.1164	0.1164		0.1164	0.1164		2,656.5168	2,656.5168	0.0893		2,658.7489
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0112</b>	<b>3.6566</b>	<b>15.8177</b>	<b>0.0281</b>		<b>0.1164</b>	<b>0.1164</b>		<b>0.1164</b>	<b>0.1164</b>		<b>2,656.5168</b>	<b>2,656.5168</b>	<b>0.0893</b>		<b>2,658.7489</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0116	0.2295	9.5000e-004	0.1677	2.7000e-004	0.1679	0.0445	2.5000e-004	0.0447		108.6428	108.6428	9.1000e-004	2.0400e-003	109.2738
<b>Total</b>	<b>0.0181</b>	<b>0.0116</b>	<b>0.2295</b>	<b>9.5000e-004</b>	<b>0.1677</b>	<b>2.7000e-004</b>	<b>0.1679</b>	<b>0.0445</b>	<b>2.5000e-004</b>	<b>0.0447</b>		<b>108.6428</b>	<b>108.6428</b>	<b>9.1000e-004</b>	<b>2.0400e-003</b>	<b>109.2738</b>

Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0112	3.6566	15.8177	0.0281		0.1164	0.1164		0.1164	0.1164	0.0000	2,656.5168	2,656.5168	0.0893		2,658.7489
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0112</b>	<b>3.6566</b>	<b>15.8177</b>	<b>0.0281</b>		<b>0.1164</b>	<b>0.1164</b>		<b>0.1164</b>	<b>0.1164</b>	<b>0.0000</b>	<b>2,656.5168</b>	<b>2,656.5168</b>	<b>0.0893</b>		<b>2,658.7489</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0116	0.2295	9.5000e-004	0.1546	2.7000e-004	0.1548	0.0413	2.5000e-004	0.0415		108.6428	108.6428	9.1000e-004	2.0400e-003	109.2738
<b>Total</b>	<b>0.0181</b>	<b>0.0116</b>	<b>0.2295</b>	<b>9.5000e-004</b>	<b>0.1546</b>	<b>2.7000e-004</b>	<b>0.1548</b>	<b>0.0413</b>	<b>2.5000e-004</b>	<b>0.0415</b>		<b>108.6428</b>	<b>108.6428</b>	<b>9.1000e-004</b>	<b>2.0400e-003</b>	<b>109.2738</b>

**3.7 Architectural Coating - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day				
Archit. Coating	73.5417					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003	281.6957
<b>Total</b>	<b>73.6566</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>	<b>281.6957</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0157	0.0100	0.1989	8.3000e-004	0.1453	2.3000e-004	0.1455	0.0385	2.2000e-004	0.0388		94.1571	94.1571	7.9000e-004	1.7700e-003	94.7039
<b>Total</b>	<b>0.0157</b>	<b>0.0100</b>	<b>0.1989</b>	<b>8.3000e-004</b>	<b>0.1453</b>	<b>2.3000e-004</b>	<b>0.1455</b>	<b>0.0385</b>	<b>2.2000e-004</b>	<b>0.0388</b>		<b>94.1571</b>	<b>94.1571</b>	<b>7.9000e-004</b>	<b>1.7700e-003</b>	<b>94.7039</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	73.5417					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>73.6566</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Construction Phase 5 - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0157	0.0100	0.1989	8.3000e-004	0.1339	2.3000e-004	0.1342	0.0358	2.2000e-004	0.0360		94.1571	94.1571	7.9000e-004	1.7700e-003	94.7039
<b>Total</b>	<b>0.0157</b>	<b>0.0100</b>	<b>0.1989</b>	<b>8.3000e-004</b>	<b>0.1339</b>	<b>2.3000e-004</b>	<b>0.1342</b>	<b>0.0358</b>	<b>2.2000e-004</b>	<b>0.0360</b>		<b>94.1571</b>	<b>94.1571</b>	<b>7.9000e-004</b>	<b>1.7700e-003</b>	<b>94.7039</b>

Construction Phase 5 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Construction Phase 5**  
San Bernardino-South Coast County, Annual

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	158.67	1000sqft	1.52	158,666.00	0
Other Non-Asphalt Surfaces	687.07	1000sqft	15.77	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Based on information provided by the College District.

Trips and VMT - See Construction Phase 5 assumptions worksheet in the AQ/GHG appendix of the DEIR.

Demolition -

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	687,073.00	0.00
tblLandUse	LotAcreage	3.64	1.52
tblTripsAndVMT	HaulingTripNumber	362.00	364.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00

Construction Phase 5 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2049	0.1996	1.0245	2.3835	5.8100e-003	0.3769	0.0145	0.3914	0.1386	0.0144	0.1530	0.0000	517.7245	517.7245	0.0164	7.8600e-003	520.4749
2050	0.8111	0.4330	1.0491	2.2500e-003	0.0476	5.2600e-003	0.0528	0.0128	5.2400e-003	0.0181	0.0000	197.9805	197.9805	6.1300e-003	2.9700e-003	199.0177
<b>Maximum</b>	<b>0.8111</b>	<b>1.0245</b>	<b>2.3835</b>	<b>5.8100e-003</b>	<b>0.3769</b>	<b>0.0145</b>	<b>0.3914</b>	<b>0.1386</b>	<b>0.0144</b>	<b>0.1530</b>	<b>0.0000</b>	<b>517.7245</b>	<b>517.7245</b>	<b>0.0164</b>	<b>7.8600e-003</b>	<b>520.4749</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2049	0.1996	1.0245	2.3835	5.8100e-003	0.2116	0.0145	0.2260	0.0731	0.0144	0.0875	0.0000	517.7240	517.7240	0.0164	7.8600e-003	520.4744
2050	0.8111	0.4330	1.0491	2.2500e-003	0.0440	5.2600e-003	0.0492	0.0119	5.2400e-003	0.0172	0.0000	197.9803	197.9803	6.1300e-003	2.9700e-003	199.0175
<b>Maximum</b>	<b>0.8111</b>	<b>1.0245</b>	<b>2.3835</b>	<b>5.8100e-003</b>	<b>0.2116</b>	<b>0.0145</b>	<b>0.2260</b>	<b>0.0731</b>	<b>0.0144</b>	<b>0.0875</b>	<b>0.0000</b>	<b>517.7240</b>	<b>517.7240</b>	<b>0.0164</b>	<b>7.8600e-003</b>	<b>520.4744</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>39.80</b>	<b>0.00</b>	<b>38.04</b>	<b>43.88</b>	<b>0.00</b>	<b>38.83</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

Construction Phase 5 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

1	1-1-2049	3-31-2049	0.3235	0.3235
2	4-1-2049	6-30-2049	0.2962	0.2962
3	7-1-2049	9-30-2049	0.2995	0.2995
4	10-1-2049	12-31-2049	0.3012	0.3012
5	1-1-2050	3-31-2050	0.2945	0.2945
6	4-1-2050	6-30-2050	0.5785	0.5785
7	7-1-2050	9-30-2050	0.3720	0.3720
		Highest	0.5785	0.5785

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2049	1/28/2049	5	20	
2	Site Preparation	Site Preparation	1/29/2049	2/11/2049	5	10	
3	Grading	Grading	2/12/2049	3/25/2049	5	30	
4	Building Construction	Building Construction	3/26/2049	5/19/2050	5	300	
5	Paving	Paving	5/20/2050	6/16/2050	5	20	
6	Architectural Coating	Architectural Coating	6/17/2050	7/14/2050	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 15.77

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 237,999; Non-Residential Outdoor: 79,333; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Scrapers	2	8.00	367	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	364.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	67.00	26.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2049**

**Unmitigated Construction On-Site**



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0392	0.0000	0.0392	5.9400e-003	0.0000	5.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0170	0.0531	0.1858	4.6000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	39.7218	39.7218	1.3500e-003	0.0000	39.7555
<b>Total</b>	<b>0.0170</b>	<b>0.0531</b>	<b>0.1858</b>	<b>4.6000e-004</b>	<b>0.0392</b>	<b>1.6300e-003</b>	<b>0.0408</b>	<b>5.9400e-003</b>	<b>1.6300e-003</b>	<b>7.5700e-003</b>	<b>0.0000</b>	<b>39.7218</b>	<b>39.7218</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>39.7555</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-004	0.0193	6.0300e-003	8.0000e-005	3.1300e-003	1.9000e-004	3.3200e-003	8.6000e-004	1.8000e-004	1.0400e-003	0.0000	7.4452	7.4452	2.7000e-004	1.1800e-003	7.8029
Vendor	4.0000e-005	1.4000e-003	5.5000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.5352	0.5352	1.0000e-005	8.0000e-005	0.5588
Worker	1.7000e-004	1.2000e-004	2.4300e-003	1.0000e-005	1.6400e-003	0.0000	1.6500e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	1.0102	1.0102	1.0000e-005	2.0000e-005	1.0161
<b>Total</b>	<b>6.1000e-004</b>	<b>0.0209</b>	<b>9.0100e-003</b>	<b>1.0000e-004</b>	<b>5.0200e-003</b>	<b>2.0000e-004</b>	<b>5.2300e-003</b>	<b>1.3700e-003</b>	<b>1.9000e-004</b>	<b>1.5600e-003</b>	<b>0.0000</b>	<b>8.9905</b>	<b>8.9905</b>	<b>2.9000e-004</b>	<b>1.2800e-003</b>	<b>9.3778</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					0.0168	0.0000	0.0168	2.5400e-003	0.0000	2.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0170	0.0531	0.1858	4.6000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	39.7218	39.7218	1.3500e-003	0.0000	39.7554
<b>Total</b>	<b>0.0170</b>	<b>0.0531</b>	<b>0.1858</b>	<b>4.6000e-004</b>	<b>0.0168</b>	<b>1.6300e-003</b>	<b>0.0168</b>	<b>2.5400e-003</b>	<b>1.6300e-003</b>	<b>4.1700e-003</b>	<b>0.0000</b>	<b>39.7218</b>	<b>39.7218</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>39.7554</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-004	0.0193	6.0300e-003	8.0000e-005	2.9200e-003	1.9000e-004	3.1100e-003	8.1000e-004	1.8000e-004	9.9000e-004	0.0000	7.4452	7.4452	2.7000e-004	1.1800e-003	7.8029
Vendor	4.0000e-005	1.4000e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.5352	0.5352	1.0000e-005	8.0000e-005	0.5588
Worker	1.7000e-004	1.2000e-004	2.4300e-003	1.0000e-005	1.5200e-003	0.0000	1.5200e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	1.0102	1.0102	1.0000e-005	2.0000e-005	1.0161
<b>Total</b>	<b>6.1000e-004</b>	<b>0.0209</b>	<b>9.0100e-003</b>	<b>1.0000e-004</b>	<b>4.6800e-003</b>	<b>2.0000e-004</b>	<b>4.8800e-003</b>	<b>1.2900e-003</b>	<b>1.9000e-004</b>	<b>1.4800e-003</b>	<b>0.0000</b>	<b>8.9905</b>	<b>8.9905</b>	<b>2.9000e-004</b>	<b>1.2800e-003</b>	<b>9.3778</b>

**3.3 Site Preparation - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8300e-003	0.0400	0.0789	2.3000e-004		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	20.0023	20.0023	7.7000e-004	0.0000	20.0217
<b>Total</b>	<b>9.8300e-003</b>	<b>0.0400</b>	<b>0.0789</b>	<b>2.3000e-004</b>	<b>0.0983</b>	<b>1.0100e-003</b>	<b>0.0993</b>	<b>0.0505</b>	<b>1.0100e-003</b>	<b>0.0515</b>	<b>0.0000</b>	<b>20.0023</b>	<b>20.0023</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>20.0217</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4000e-003	5.5000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.5352	0.5352	1.0000e-005	8.0000e-005	0.5588
Worker	1.0000e-004	7.0000e-005	1.4600e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.6061	0.6061	1.0000e-005	1.0000e-005	0.6097
<b>Total</b>	<b>1.4000e-004</b>	<b>1.4700e-003</b>	<b>2.0100e-003</b>	<b>2.0000e-005</b>	<b>1.2400e-003</b>	<b>1.0000e-005</b>	<b>1.2500e-003</b>	<b>3.3000e-004</b>	<b>1.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>1.1413</b>	<b>1.1413</b>	<b>2.0000e-005</b>	<b>9.0000e-005</b>	<b>1.1685</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0420	0.0000	0.0420	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8300e-003	0.0400	0.0789	2.3000e-004		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	20.0023	20.0023	7.7000e-004	0.0000	20.0216
<b>Total</b>	<b>9.8300e-003</b>	<b>0.0400</b>	<b>0.0789</b>	<b>2.3000e-004</b>	<b>0.0420</b>	<b>1.0100e-003</b>	<b>0.0430</b>	<b>0.0216</b>	<b>1.0100e-003</b>	<b>0.0226</b>	<b>0.0000</b>	<b>20.0023</b>	<b>20.0023</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>20.0216</b>

**Mitigated Construction Off-Site**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4000e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.5352	0.5352	1.0000e-005	8.0000e-005	0.5588
Worker	1.0000e-004	7.0000e-005	1.4600e-003	1.0000e-005	9.1000e-004	0.0000	9.1000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.6061	0.6061	1.0000e-005	1.0000e-005	0.6097
<b>Total</b>	<b>1.4000e-004</b>	<b>1.4700e-003</b>	<b>2.0100e-003</b>	<b>2.0000e-005</b>	<b>1.1500e-003</b>	<b>1.0000e-005</b>	<b>1.1600e-003</b>	<b>3.1000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.1413</b>	<b>1.1413</b>	<b>2.0000e-005</b>	<b>9.0000e-005</b>	<b>1.1685</b>

**3.4 Grading - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0409	0.1108	0.3347	1.0500e-003		3.3800e-003	3.3800e-003		3.3800e-003	3.3800e-003	0.0000	98.1543	98.1543	3.2300e-003	0.0000	98.2350
<b>Total</b>	<b>0.0409</b>	<b>0.1108</b>	<b>0.3347</b>	<b>1.0500e-003</b>	<b>0.1381</b>	<b>3.3800e-003</b>	<b>0.1414</b>	<b>0.0548</b>	<b>3.3800e-003</b>	<b>0.0582</b>	<b>0.0000</b>	<b>98.1543</b>	<b>98.1543</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>98.2350</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-004	8.4200e-003	3.2900e-003	3.0000e-005	1.5100e-003	6.0000e-005	1.5700e-003	4.4000e-004	6.0000e-005	4.9000e-004	0.0000	3.2111	3.2111	7.0000e-005	4.7000e-004	3.3530
Worker	3.4000e-004	2.4000e-004	4.8700e-003	2.0000e-005	3.2900e-003	1.0000e-005	3.3000e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	2.0203	2.0203	2.0000e-005	4.0000e-005	2.0322
<b>Total</b>	<b>5.8000e-004</b>	<b>8.6600e-003</b>	<b>8.1600e-003</b>	<b>5.0000e-005</b>	<b>4.8000e-003</b>	<b>7.0000e-005</b>	<b>4.8700e-003</b>	<b>1.3100e-003</b>	<b>7.0000e-005</b>	<b>1.3700e-003</b>	<b>0.0000</b>	<b>5.2314</b>	<b>5.2314</b>	<b>9.0000e-005</b>	<b>5.1000e-004</b>	<b>5.3852</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0590	0.0000	0.0590	0.0234	0.0000	0.0234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0409	0.1108	0.3347	1.0500e-003		3.3800e-003	3.3800e-003		3.3800e-003	3.3800e-003	0.0000	98.1542	98.1542	3.2300e-003	0.0000	98.2349
<b>Total</b>	<b>0.0409</b>	<b>0.1108</b>	<b>0.3347</b>	<b>1.0500e-003</b>	<b>0.0590</b>	<b>3.3800e-003</b>	<b>0.0624</b>	<b>0.0234</b>	<b>3.3800e-003</b>	<b>0.0268</b>	<b>0.0000</b>	<b>98.1542</b>	<b>98.1542</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>98.2349</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-004	8.4200e-003	3.2900e-003	3.0000e-005	1.4200e-003	6.0000e-005	1.4700e-003	4.1000e-004	6.0000e-005	4.7000e-004	0.0000	3.2111	3.2111	7.0000e-005	4.7000e-004	3.3530
Worker	3.4000e-004	2.4000e-004	4.8700e-003	2.0000e-005	3.0300e-003	1.0000e-005	3.0400e-003	8.1000e-004	1.0000e-005	8.2000e-004	0.0000	2.0203	2.0203	2.0000e-005	4.0000e-005	2.0322

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Total	5.8000e-004	8.6600e-003	8.1600e-003	5.0000e-005	4.4500e-003	7.0000e-005	4.5100e-003	1.2200e-003	7.0000e-005	1.2900e-003	0.0000	5.2314	5.2314	9.0000e-005	5.1000e-004	5.3852
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3.5 Building Construction - 2049

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1203	0.6925	1.6199	3.1100e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	264.1754	264.1754	9.4900e-003	0.0000	264.4127
<b>Total</b>	<b>0.1203</b>	<b>0.6925</b>	<b>1.6199</b>	<b>3.1100e-003</b>		<b>7.4100e-003</b>	<b>7.4100e-003</b>		<b>7.4100e-003</b>	<b>7.4100e-003</b>	<b>0.0000</b>	<b>264.1754</b>	<b>264.1754</b>	<b>9.4900e-003</b>	<b>0.0000</b>	<b>264.4127</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0917	0.0358	3.6000e-004	0.0165	6.3000e-004	0.0171	4.7600e-003	6.0000e-004	5.3600e-003	0.0000	34.9609	34.9609	7.6000e-004	5.1200e-003	36.5063
Worker	7.7000e-003	5.4500e-003	0.1092	4.4000e-004	0.0738	1.3000e-004	0.0740	0.0196	1.2000e-004	0.0197	0.0000	45.3466	45.3466	3.9000e-004	8.6000e-004	45.6123
<b>Total</b>	<b>0.0103</b>	<b>0.0971</b>	<b>0.1451</b>	<b>8.0000e-004</b>	<b>0.0903</b>	<b>7.6000e-004</b>	<b>0.0911</b>	<b>0.0244</b>	<b>7.2000e-004</b>	<b>0.0251</b>	<b>0.0000</b>	<b>80.3074</b>	<b>80.3074</b>	<b>1.1500e-003</b>	<b>5.9800e-003</b>	<b>82.1186</b>

Mitigated Construction On-Site

Construction Phase 5 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1203	0.6925	1.6199	3.1100e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	264.1750	264.1750	9.4900e-003	0.0000	264.4124
<b>Total</b>	<b>0.1203</b>	<b>0.6925</b>	<b>1.6199</b>	<b>3.1100e-003</b>		<b>7.4100e-003</b>	<b>7.4100e-003</b>		<b>7.4100e-003</b>	<b>7.4100e-003</b>	<b>0.0000</b>	<b>264.1750</b>	<b>264.1750</b>	<b>9.4900e-003</b>	<b>0.0000</b>	<b>264.4124</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0917	0.0358	3.6000e-004	0.0154	6.3000e-004	0.0161	4.5000e-003	6.0000e-004	5.1000e-003	0.0000	34.9609	34.9609	7.6000e-004	5.1200e-003	36.5063
Worker	7.7000e-003	5.4500e-003	0.1092	4.4000e-004	0.0681	1.3000e-004	0.0682	0.0182	1.2000e-004	0.0183	0.0000	45.3466	45.3466	3.9000e-004	8.6000e-004	45.6123
<b>Total</b>	<b>0.0103</b>	<b>0.0971</b>	<b>0.1451</b>	<b>8.0000e-004</b>	<b>0.0835</b>	<b>7.6000e-004</b>	<b>0.0843</b>	<b>0.0227</b>	<b>7.2000e-004</b>	<b>0.0234</b>	<b>0.0000</b>	<b>80.3074</b>	<b>80.3074</b>	<b>1.1500e-003</b>	<b>5.9800e-003</b>	<b>82.1186</b>

**3.5 Building Construction - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0593	0.3411	0.7979	1.5300e-003		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	130.1162	130.1162	4.6800e-003	0.0000	130.2331

Construction Phase 5 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	0.0593	0.3411	0.7979	1.5300e-003		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	130.1162	130.1162	4.6800e-003	0.0000	130.2331
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**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2800e-003	0.0452	0.0175	1.8000e-004	8.1200e-003	3.1000e-004	8.4300e-003	2.3400e-003	3.0000e-004	2.6400e-003	0.0000	17.1162	17.1162	3.5000e-004	2.5100e-003	17.8726
Worker	3.6100e-003	2.6700e-003	0.0532	2.2000e-004	0.0364	6.0000e-005	0.0364	9.6600e-003	5.0000e-005	9.7100e-003	0.0000	22.2194	22.2194	1.8000e-004	4.2000e-004	22.3499
<b>Total</b>	<b>4.8900e-003</b>	<b>0.0479</b>	<b>0.0707</b>	<b>4.0000e-004</b>	<b>0.0445</b>	<b>3.7000e-004</b>	<b>0.0449</b>	<b>0.0120</b>	<b>3.5000e-004</b>	<b>0.0124</b>	<b>0.0000</b>	<b>39.3356</b>	<b>39.3356</b>	<b>5.3000e-004</b>	<b>2.9300e-003</b>	<b>40.2224</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0593	0.3411	0.7979	1.5300e-003		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	130.1161	130.1161	4.6800e-003	0.0000	130.2330
<b>Total</b>	<b>0.0593</b>	<b>0.3411</b>	<b>0.7979</b>	<b>1.5300e-003</b>		<b>3.6500e-003</b>	<b>3.6500e-003</b>		<b>3.6500e-003</b>	<b>3.6500e-003</b>	<b>0.0000</b>	<b>130.1161</b>	<b>130.1161</b>	<b>4.6800e-003</b>	<b>0.0000</b>	<b>130.2330</b>

**Mitigated Construction Off-Site**



Construction Phase 5 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2800e-003	0.0452	0.0175	1.8000e-004	7.6000e-003	3.1000e-004	7.9100e-003	2.2200e-003	3.0000e-004	2.5100e-003	0.0000	17.1162	17.1162	3.5000e-004	2.5100e-003	17.8726
Worker	3.6100e-003	2.6700e-003	0.0532	2.2000e-004	0.0335	6.0000e-005	0.0336	8.9600e-003	5.0000e-005	9.0200e-003	0.0000	22.2194	22.2194	1.8000e-004	4.2000e-004	22.3499
<b>Total</b>	<b>4.8900e-003</b>	<b>0.0479</b>	<b>0.0707</b>	<b>4.0000e-004</b>	<b>0.0411</b>	<b>3.7000e-004</b>	<b>0.0415</b>	<b>0.0112</b>	<b>3.5000e-004</b>	<b>0.0115</b>	<b>0.0000</b>	<b>39.3356</b>	<b>39.3356</b>	<b>5.3000e-004</b>	<b>2.9300e-003</b>	<b>40.2224</b>

3.6 Paving - 2050

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0101	0.0366	0.1582	2.8000e-004		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	24.0995	24.0995	8.1000e-004	0.0000	24.1198
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0101</b>	<b>0.0366</b>	<b>0.1582</b>	<b>2.8000e-004</b>		<b>1.1600e-003</b>	<b>1.1600e-003</b>		<b>1.1600e-003</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>24.0995</b>	<b>24.0995</b>	<b>8.1000e-004</b>	<b>0.0000</b>	<b>24.1198</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction Phase 5 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	2.4100e-003	1.0000e-005	1.6400e-003	0.0000	1.6500e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	1.0050	1.0050	1.0000e-005	2.0000e-005	1.0109
<b>Total</b>	<b>1.6000e-004</b>	<b>1.2000e-004</b>	<b>2.4100e-003</b>	<b>1.0000e-005</b>	<b>1.6400e-003</b>	<b>0.0000</b>	<b>1.6500e-003</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>1.0050</b>	<b>1.0050</b>	<b>1.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0109</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0101	0.0366	0.1582	2.8000e-004		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	24.0995	24.0995	8.1000e-004	0.0000	24.1197
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0101</b>	<b>0.0366</b>	<b>0.1582</b>	<b>2.8000e-004</b>		<b>1.1600e-003</b>	<b>1.1600e-003</b>		<b>1.1600e-003</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>24.0995</b>	<b>24.0995</b>	<b>8.1000e-004</b>	<b>0.0000</b>	<b>24.1197</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	2.4100e-003	1.0000e-005	1.5200e-003	0.0000	1.5200e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	1.0050	1.0050	1.0000e-005	2.0000e-005	1.0109

Construction Phase 5 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	1.6000e-004	1.2000e-004	2.4100e-003	1.0000e-005	1.5200e-003	0.0000	1.5200e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	1.0050	1.0050	1.0000e-005	2.0000e-005	1.0109
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**3.7 Architectural Coating - 2050**  
**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7354					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1500e-003	7.2700e-003	0.0179	3.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	2.5533	2.5533	9.0000e-005	0.0000	2.5555
<b>Total</b>	<b>0.7366</b>	<b>7.2700e-003</b>	<b>0.0179</b>	<b>3.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.5555</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.0000e-004	2.0900e-003	1.0000e-005	1.4300e-003	0.0000	1.4300e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.8710	0.8710	1.0000e-005	2.0000e-005	0.8761
<b>Total</b>	<b>1.4000e-004</b>	<b>1.0000e-004</b>	<b>2.0900e-003</b>	<b>1.0000e-005</b>	<b>1.4300e-003</b>	<b>0.0000</b>	<b>1.4300e-003</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.8710</b>	<b>0.8710</b>	<b>1.0000e-005</b>	<b>2.0000e-005</b>	<b>0.8761</b>

Construction Phase 5 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7354					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1500e-003	7.2700e-003	0.0179	3.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	2.5533	2.5533	9.0000e-005	0.0000	2.5555
<b>Total</b>	<b>0.7366</b>	<b>7.2700e-003</b>	<b>0.0179</b>	<b>3.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.5555</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.0000e-004	2.0900e-003	1.0000e-005	1.3100e-003	0.0000	1.3200e-003	3.5000e-004	0.0000	3.5000e-004	0.0000	0.8710	0.8710	1.0000e-005	2.0000e-005	0.8761
<b>Total</b>	<b>1.4000e-004</b>	<b>1.0000e-004</b>	<b>2.0900e-003</b>	<b>1.0000e-005</b>	<b>1.3100e-003</b>	<b>0.0000</b>	<b>1.3200e-003</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>0.8710</b>	<b>0.8710</b>	<b>1.0000e-005</b>	<b>2.0000e-005</b>	<b>0.8761</b>

**Construction Phase 5**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	5	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00

**Construction Phase 5**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	1.15000E-003	7.27000E-003	1.79200E-002	3.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	2.55325E+000	2.55325E+000	9.00000E-005	0.00000E+000	2.55550E+000
Concrete/Industrial Saws	2.03000E-003	1.49500E-002	3.62600E-002	6.00000E-005	1.40000E-004	1.40000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.60000E-004	0.00000E+000	5.38058E+000
Cranes	3.02400E-002	5.33400E-002	1.77400E-001	9.30000E-004	2.02000E-003	2.02000E-003	0.00000E+000	7.99477E+001	7.99477E+001	2.39000E-003	0.00000E+000	8.00075E+001
Excavators	1.22600E-002	1.97600E-002	2.13670E-001	3.80000E-004	8.30000E-004	8.30000E-004	0.00000E+000	3.27559E+001	3.27559E+001	9.80000E-004	0.00000E+000	3.27803E+001
Forklifts	3.89900E-002	2.10640E-001	5.35990E-001	8.50000E-004	2.26000E-003	2.26000E-003	0.00000E+000	7.28332E+001	7.28332E+001	3.08000E-003	0.00000E+000	7.29101E+001
Generator Sets	2.50000E-002	2.30060E-001	5.43990E-001	9.90000E-004	1.97000E-003	1.97000E-003	0.00000E+000	8.47811E+001	8.47811E+001	1.94000E-003	0.00000E+000	8.48296E+001
Graders	3.81000E-003	7.30000E-003	2.29800E-002	1.20000E-004	2.60000E-004	2.60000E-004	0.00000E+000	1.04572E+001	1.04572E+001	3.10000E-004	0.00000E+000	1.04650E+001
Pavers	4.10000E-003	1.12300E-002	6.39200E-002	1.20000E-004	5.20000E-004	5.20000E-004	0.00000E+000	9.92932E+000	9.92932E+000	3.30000E-004	0.00000E+000	9.93762E+000
Paving Equipment	3.44000E-003	8.98000E-003	5.53800E-002	1.00000E-004	4.20000E-004	4.20000E-004	0.00000E+000	8.64178E+000	8.64178E+000	2.70000E-004	0.00000E+000	8.64862E+000
Rollers	2.57000E-003	1.63500E-002	3.88700E-002	6.00000E-005	2.30000E-004	2.30000E-004	0.00000E+000	5.52841E+000	5.52841E+000	2.00000E-004	0.00000E+000	5.53352E+000
Rubber Tired Dozers	2.20400E-002	7.05700E-002	1.06730E-001	5.20000E-004	2.70000E-003	2.70000E-003	0.00000E+000	4.49184E+001	4.49184E+001	1.74000E-003	0.00000E+000	4.49618E+001
Scrapers	1.94800E-002	4.42700E-002	1.02530E-001	4.70000E-004	1.58000E-003	1.58000E-003	0.00000E+000	4.80535E+001	4.80535E+001	1.52000E-003	0.00000E+000	4.80916E+001
Tractors/Loaders/Bulldozers	7.13500E-002	4.17120E-001	1.04014E+000	1.69000E-003	4.49000E-003	4.49000E-003	0.00000E+000	1.44813E+002	1.44813E+002	5.61000E-003	0.00000E+000	1.44954E+002
Welders	2.20100E-002	1.69380E-001	2.37450E-001	3.80000E-004	8.20000E-004	8.20000E-004	0.00000E+000	2.82331E+001	2.82331E+001	1.79000E-003	0.00000E+000	2.82779E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	1.15000E-003	7.27000E-003	1.79200E-002	3.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	2.55325E+000	2.55325E+000	9.00000E-005	0.00000E+000	2.55550E+000
Concrete/Industrial Saws	2.03000E-003	1.49500E-002	3.62600E-002	6.00000E-005	1.40000E-004	1.40000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.60000E-004	0.00000E+000	5.38058E+000
Cranes	3.02400E-002	5.33400E-002	1.77400E-001	9.30000E-004	2.02000E-003	2.02000E-003	0.00000E+000	7.99476E+001	7.99476E+001	2.39000E-003	0.00000E+000	8.00074E+001
Excavators	1.22600E-002	1.97600E-002	2.13670E-001	3.80000E-004	8.30000E-004	8.30000E-004	0.00000E+000	3.27558E+001	3.27558E+001	9.80000E-004	0.00000E+000	3.27803E+001
Forklifts	3.89900E-002	2.10640E-001	5.35990E-001	8.50000E-004	2.26000E-003	2.26000E-003	0.00000E+000	7.28331E+001	7.28331E+001	3.08000E-003	0.00000E+000	7.29100E+001
Generator Sets	2.50000E-002	2.30060E-001	5.43990E-001	9.90000E-004	1.97000E-003	1.97000E-003	0.00000E+000	8.47810E+001	8.47810E+001	1.94000E-003	0.00000E+000	8.48295E+001
Graders	3.81000E-003	7.30000E-003	2.29800E-002	1.20000E-004	2.60000E-004	2.60000E-004	0.00000E+000	1.04571E+001	1.04571E+001	3.10000E-004	0.00000E+000	1.04650E+001
Pavers	4.10000E-003	1.12300E-002	6.39200E-002	1.20000E-004	5.20000E-004	5.20000E-004	0.00000E+000	9.92931E+000	9.92931E+000	3.30000E-004	0.00000E+000	9.93761E+000
Paving Equipment	3.44000E-003	8.98000E-003	5.53800E-002	1.00000E-004	4.20000E-004	4.20000E-004	0.00000E+000	8.64177E+000	8.64177E+000	2.70000E-004	0.00000E+000	8.64861E+000

**Construction Phase 5**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Rollers	2.57000E-003	1.63500E-002	3.88700E-002	6.00000E-005	2.30000E-004	2.30000E-004	0.00000E+000	5.52841E+000	5.52841E+000	2.00000E-004	0.00000E+000	5.53351E+000
Rubber Tired Dozers	2.20400E-002	7.05700E-002	1.06730E-001	5.20000E-004	2.70000E-003	2.70000E-003	0.00000E+000	4.49183E+001	4.49183E+001	1.74000E-003	0.00000E+000	4.49618E+001
Scrapers	1.94800E-002	4.42700E-002	1.02530E-001	4.70000E-004	1.58000E-003	1.58000E-003	0.00000E+000	4.80535E+001	4.80535E+001	1.52000E-003	0.00000E+000	4.80915E+001
Tractors/Loaders/Bac khoes	7.13500E-002	4.17120E-001	1.04013E+000	1.69000E-003	4.49000E-003	4.49000E-003	0.00000E+000	1.44813E+002	1.44813E+002	5.61000E-003	0.00000E+000	1.44953E+002
Welders	2.20100E-002	1.69380E-001	2.37450E-001	3.80000E-004	8.20000E-004	8.20000E-004	0.00000E+000	2.82331E+001	2.82331E+001	1.79000E-003	0.00000E+000	2.82778E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25082E-006	1.25082E-006	0.00000E+000	0.00000E+000	1.12489E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22116E-006	1.22116E-006	0.00000E+000	0.00000E+000	1.22024E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23570E-006	1.23570E-006	0.00000E+000	0.00000E+000	1.23440E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17883E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.91257E-006	1.91257E-006	0.00000E+000	0.00000E+000	1.91114E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.00712E-006	1.00712E-006	0.00000E+000	0.00000E+000	1.00628E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15717E-006	1.15717E-006	0.00000E+000	0.00000E+000	1.15625E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.80717E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11313E-006	1.11313E-006	0.00000E+000	0.00000E+000	1.11205E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.04051E-006	1.04051E-006	0.00000E+000	0.00000E+000	1.24762E-006
Tractors/Loaders/Bac khoes	0.00000E+000	0.00000E+000	9.61409E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17392E-006	1.17392E-006	0.00000E+000	0.00000E+000	1.17279E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06258E-006	1.06258E-006	0.00000E+000	0.00000E+000	1.41453E-006

**Construction Phase 5**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input		
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00	
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day) 2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00	
Yes	Clean Paved Road	% PM Reduction	9.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.13	0.04	0.12	0.03	0.08	0.07
Demolition	Fugitive Dust	0.04	0.01	0.02	0.00	0.57	0.57
Demolition	Roads	0.01	0.00	0.00	0.00	0.07	0.06
Grading	Fugitive Dust	0.14	0.05	0.06	0.02	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Site Preparation	Fugitive Dust	0.10	0.05	0.04	0.02	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.07	0.06



# CalEEMod Output: Phase 5 Construction – Mitigated

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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 5 Mitigated**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	158.67	1000sqft	1.52	158,666.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Trips and VMT - See Construction Phase 5 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.64	1.52
tblTripsAndVMT	HaulingTripNumber	362.00	364.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblTripsAndVMT	VendorTripNumber	0.00	6.00
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**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	1.1881	7.6982	13.6885	0.0372	7.2328	0.1181	7.3238	3.4655	0.1172	3.5563	0.0000	3,645.5363	3,645.5363	0.1296	0.1401	3,690.5203
2050	29.5470	7.2006	13.6283	0.0321	0.9155	0.0714	0.9754	0.2466	0.0714	0.3061	0.0000	3,068.5382	3,068.5382	0.0967	0.0646	3,090.2134
<b>Maximum</b>	<b>29.5470</b>	<b>7.6982</b>	<b>13.6885</b>	<b>0.0372</b>	<b>7.2328</b>	<b>0.1181</b>	<b>7.3238</b>	<b>3.4655</b>	<b>0.1172</b>	<b>3.5563</b>	<b>0.0000</b>	<b>3,645.5363</b>	<b>3,645.5363</b>	<b>0.1296</b>	<b>0.1401</b>	<b>3,690.5203</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	1.1881	7.6982	13.6885	0.0372	3.1668	0.1181	3.2578	1.5020	0.1172	1.5929	0.0000	3,645.5363	3,645.5363	0.1296	0.1401	3,690.5203
2050	29.5470	7.2006	13.6283	0.0321	0.8462	0.0714	0.9061	0.2296	0.0714	0.2891	0.0000	3,068.5382	3,068.5382	0.0967	0.0646	3,090.2134
<b>Maximum</b>	<b>29.5470</b>	<b>7.6982</b>	<b>13.6885</b>	<b>0.0372</b>	<b>3.1668</b>	<b>0.1181</b>	<b>3.2578</b>	<b>1.5020</b>	<b>0.1172</b>	<b>1.5929</b>	<b>0.0000</b>	<b>3,645.5363</b>	<b>3,645.5363</b>	<b>0.1296</b>	<b>0.1401</b>	<b>3,690.5203</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>50.75</b>	<b>0.00</b>	<b>49.83</b>	<b>53.35</b>	<b>0.00</b>	<b>51.27</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/2/2049	8/27/2049	5	20	
2	Site Preparation	Site Preparation	8/28/2049	8/31/2049	5	2	
3	Grading	Grading	9/1/2049	9/6/2049	5	4	
4	Building Construction	Building Construction	9/7/2049	6/13/2050	5	200	
5	Paving	Paving	6/14/2050	6/27/2050	5	10	
6	Architectural Coating	Architectural Coating	6/28/2050	7/11/2050	5	10	

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 237,999; Non-Residential Outdoor: 79,333; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	364.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	67.00	26.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2049**

**Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					3.9203	0.0000	3.9203	0.5936	0.0000	0.5936			0.0000			0.0000

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-Road	1.1266	5.7269	12.7926	0.0281		0.0980	0.0980		0.0980	0.0980		2,662.1297	2,662.1297	0.0978		2,664.5757
<b>Total</b>	<b>1.1266</b>	<b>5.7269</b>	<b>12.7926</b>	<b>0.0281</b>	<b>3.9203</b>	<b>0.0980</b>	<b>4.0183</b>	<b>0.5936</b>	<b>0.0980</b>	<b>0.6915</b>		<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.0978</b>		<b>2,664.5757</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0412	1.8282	0.5988	7.5800e-003	0.3187	0.0189	0.3375	0.0874	0.0181	0.1054		820.1031	820.1031	0.0296	0.1297	859.5043
Vendor	4.1400e-003	0.1335	0.0540	5.5000e-004	0.0256	9.6000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		58.9269	58.9269	1.2800e-003	8.6300e-003	61.5304
Worker	0.0162	9.6300e-003	0.2431	9.2000e-004	0.1453	2.5000e-004	0.1456	0.0385	2.3000e-004	0.0388		104.3767	104.3767	8.0000e-004	1.7200e-003	104.9098
<b>Total</b>	<b>0.0616</b>	<b>1.9713</b>	<b>0.8959</b>	<b>9.0500e-003</b>	<b>0.4896</b>	<b>0.0201</b>	<b>0.5097</b>	<b>0.1333</b>	<b>0.0192</b>	<b>0.1525</b>		<b>983.4067</b>	<b>983.4067</b>	<b>0.0317</b>	<b>0.1401</b>	<b>1,025.9445</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6759	0.0000	1.6759	0.2538	0.0000	0.2538			0.0000			0.0000
Off-Road	1.1266	5.7269	12.7926	0.0281		0.0980	0.0980		0.0980	0.0980	0.0000	2,662.1297	2,662.1297	0.0978		2,664.5757
<b>Total</b>	<b>1.1266</b>	<b>5.7269</b>	<b>12.7926</b>	<b>0.0281</b>	<b>1.6759</b>	<b>0.0980</b>	<b>1.7739</b>	<b>0.2538</b>	<b>0.0980</b>	<b>0.3517</b>	<b>0.0000</b>	<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.0978</b>		<b>2,664.5757</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0412	1.8282	0.5988	7.5800e-003	0.2970	0.0189	0.3159	0.0821	0.0181	0.1001		820.1031	820.1031	0.0296	0.1297	859.5043
Vendor	4.1400e-003	0.1335	0.0540	5.5000e-004	0.0240	9.6000e-004	0.0249	6.9800e-003	9.2000e-004	7.9000e-003		58.9269	58.9269	1.2800e-003	8.6300e-003	61.5304
Worker	0.0162	9.6300e-003	0.2431	9.2000e-004	0.1339	2.5000e-004	0.1342	0.0358	2.3000e-004	0.0360		104.3767	104.3767	8.0000e-004	1.7200e-003	104.9098
<b>Total</b>	<b>0.0616</b>	<b>1.9713</b>	<b>0.8959</b>	<b>9.0500e-003</b>	<b>0.4549</b>	<b>0.0201</b>	<b>0.4750</b>	<b>0.1248</b>	<b>0.0192</b>	<b>0.1440</b>		<b>983.4067</b>	<b>983.4067</b>	<b>0.0317</b>	<b>0.1401</b>	<b>1,025.9445</b>

**3.3 Site Preparation - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.8008	2.6618	5.7438	0.0211		0.0750	0.0750		0.0750	0.0750		1,994.6929	1,994.6929	0.0705		1,996.4543
<b>Total</b>	<b>0.8008</b>	<b>2.6618</b>	<b>5.7438</b>	<b>0.0211</b>	<b>6.2662</b>	<b>0.0750</b>	<b>6.3412</b>	<b>3.0041</b>	<b>0.0750</b>	<b>3.0791</b>		<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0705</b>		<b>1,996.4543</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.1400e-003	0.1335	0.0540	5.5000e-004	0.0256	9.6000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003	58.9269	58.9269	1.2800e-003	8.6300e-003	61.5304	
Worker	9.9800e-003	5.9300e-003	0.1496	5.7000e-004	0.0894	1.5000e-004	0.0896	0.0237	1.4000e-004	0.0239	64.2318	64.2318	4.9000e-004	1.0600e-003	64.5599	
<b>Total</b>	<b>0.0141</b>	<b>0.1394</b>	<b>0.2037</b>	<b>1.1200e-003</b>	<b>0.1150</b>	<b>1.1100e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.0600e-003</b>	<b>0.0322</b>	<b>123.1587</b>	<b>123.1587</b>	<b>1.7700e-003</b>	<b>9.6900e-003</b>	<b>126.0903</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6788	0.0000	2.6788	1.2843	0.0000	1.2843			0.0000			0.0000
Off-Road	0.8008	2.6618	5.7438	0.0211		0.0750	0.0750		0.0750	0.0750	0.0000	1,994.6929	1,994.6929	0.0705		1,996.4543
<b>Total</b>	<b>0.8008</b>	<b>2.6618</b>	<b>5.7438</b>	<b>0.0211</b>	<b>2.6788</b>	<b>0.0750</b>	<b>2.7538</b>	<b>1.2843</b>	<b>0.0750</b>	<b>1.3592</b>	<b>0.0000</b>	<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0705</b>		<b>1,996.4543</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1400e-003	0.1335	0.0540	5.5000e-004	0.0240	9.6000e-004	0.0249	6.9800e-003	9.2000e-004	7.9000e-003	58.9269	58.9269	1.2800e-003	8.6300e-003	61.5304	

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	9.9800e-003	5.9300e-003	0.1496	5.7000e-004	0.0824	1.5000e-004	0.0826	0.0220	1.4000e-004	0.0221		64.2318	64.2318	4.9000e-004	1.0600e-003	64.5599
<b>Total</b>	<b>0.0141</b>	<b>0.1394</b>	<b>0.2037</b>	<b>1.1200e-003</b>	<b>0.1064</b>	<b>1.1100e-003</b>	<b>0.1075</b>	<b>0.0290</b>	<b>1.0600e-003</b>	<b>0.0300</b>		<b>123.1587</b>	<b>123.1587</b>	<b>1.7700e-003</b>	<b>9.6900e-003</b>	<b>126.0903</b>

**3.4 Grading - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	0.9764	3.5432	7.7686	0.0252		0.0893	0.0893		0.0893	0.0893		2,388.2741	2,388.2741	0.0857		2,390.4165
<b>Total</b>	<b>0.9764</b>	<b>3.5432</b>	<b>7.7686</b>	<b>0.0252</b>	<b>7.0826</b>	<b>0.0893</b>	<b>7.1719</b>	<b>3.4247</b>	<b>0.0893</b>	<b>3.5141</b>		<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.0857</b>		<b>2,390.4165</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2100e-003	0.2002	0.0811	8.3000e-004	0.0384	1.4400e-003	0.0399	0.0111	1.3800e-003	0.0125		88.3903	88.3903	1.9300e-003	0.0129	92.2956
Worker	0.0125	7.4100e-003	0.1870	7.1000e-004	0.1118	1.9000e-004	0.1120	0.0296	1.7000e-004	0.0298		80.2897	80.2897	6.1000e-004	1.3200e-003	80.6999
<b>Total</b>	<b>0.0187</b>	<b>0.2076</b>	<b>0.2681</b>	<b>1.5400e-003</b>	<b>0.1502</b>	<b>1.6300e-003</b>	<b>0.1519</b>	<b>0.0407</b>	<b>1.5500e-003</b>	<b>0.0423</b>		<b>168.6801</b>	<b>168.6801</b>	<b>2.5400e-003</b>	<b>0.0143</b>	<b>172.9955</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	0.9764	3.5432	7.7686	0.0252		0.0893	0.0893		0.0893	0.0893	0.0000	2,388.2741	2,388.2741	0.0857		2,390.4165
<b>Total</b>	<b>0.9764</b>	<b>3.5432</b>	<b>7.7686</b>	<b>0.0252</b>	<b>3.0278</b>	<b>0.0893</b>	<b>3.1171</b>	<b>1.4641</b>	<b>0.0893</b>	<b>1.5534</b>	<b>0.0000</b>	<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.0857</b>		<b>2,390.4165</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2100e-003	0.2002	0.0811	8.3000e-004	0.0360	1.4400e-003	0.0374	0.0105	1.3800e-003	0.0118		88.3903	88.3903	1.9300e-003	0.0129	92.2956
Worker	0.0125	7.4100e-003	0.1870	7.1000e-004	0.1030	1.9000e-004	0.1032	0.0275	1.7000e-004	0.0277		80.2897	80.2897	6.1000e-004	1.3200e-003	80.6999
<b>Total</b>	<b>0.0187</b>	<b>0.2076</b>	<b>0.2681</b>	<b>1.5400e-003</b>	<b>0.1390</b>	<b>1.6300e-003</b>	<b>0.1406</b>	<b>0.0380</b>	<b>1.5500e-003</b>	<b>0.0395</b>		<b>168.6801</b>	<b>168.6801</b>	<b>2.5400e-003</b>	<b>0.0143</b>	<b>172.9955</b>

**3.5 Building Construction - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525		2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>		<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0269	0.8677	0.3513	3.5900e-003	0.1666	6.2500e-003	0.1728	0.0480	5.9800e-003	0.0539		383.0248	383.0248	8.3500e-003	0.0561	399.9476
Worker	0.0836	0.0497	1.2530	4.7400e-003	0.7489	1.2700e-003	0.7502	0.1986	1.1700e-003	0.1998		537.9412	537.9412	4.1100e-003	8.8800e-003	540.6892
<b>Total</b>	<b>0.1105</b>	<b>0.9173</b>	<b>1.6042</b>	<b>8.3300e-003</b>	<b>0.9155</b>	<b>7.5200e-003</b>	<b>0.9230</b>	<b>0.2466</b>	<b>7.1500e-003</b>	<b>0.2537</b>		<b>920.9660</b>	<b>920.9660</b>	<b>0.0125</b>	<b>0.0650</b>	<b>940.6368</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525	0.0000	2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>	<b>0.0000</b>	<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0269	0.8677	0.3513	3.5900e-003	0.1559	6.2500e-003	0.1621	0.0453	5.9800e-003	0.0513		383.0248	383.0248	8.3500e-003	0.0561	399.9476
Worker	0.0836	0.0497	1.2530	4.7400e-003	0.6903	1.2700e-003	0.6916	0.1842	1.1700e-003	0.1854		537.9412	537.9412	4.1100e-003	8.8800e-003	540.6892
<b>Total</b>	<b>0.1105</b>	<b>0.9173</b>	<b>1.6042</b>	<b>8.3300e-003</b>	<b>0.8462</b>	<b>7.5200e-003</b>	<b>0.8537</b>	<b>0.2296</b>	<b>7.1500e-003</b>	<b>0.2367</b>		<b>920.9660</b>	<b>920.9660</b>	<b>0.0125</b>	<b>0.0650</b>	<b>940.6368</b>

**3.5 Building Construction - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525		2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>		<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0269	0.8689	0.3480	3.5700e-003	0.1666	6.2400e-003	0.1728	0.0480	5.9700e-003	0.0539	380.7191	380.7191	7.8800e-003	0.0558	397.5350	
Worker	0.0795	0.0495	1.2397	4.7000e-003	0.7489	1.2100e-003	0.7501	0.1986	1.1100e-003	0.1997	535.1615	535.1615	3.9500e-003	8.8600e-003	537.8996	
<b>Total</b>	<b>0.1063</b>	<b>0.9184</b>	<b>1.5877</b>	<b>8.2700e-003</b>	<b>0.9155</b>	<b>7.4500e-003</b>	<b>0.9229</b>	<b>0.2466</b>	<b>7.0800e-003</b>	<b>0.2537</b>	<b>915.8805</b>	<b>915.8805</b>	<b>0.0118</b>	<b>0.0646</b>	<b>935.4347</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525	0.0000	2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>	<b>0.0000</b>	<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0269	0.8689	0.3480	3.5700e-003	0.1559	6.2400e-003	0.1621	0.0453	5.9700e-003	0.0513		380.7191	380.7191	7.8800e-003	0.0558	397.5350
Worker	0.0795	0.0495	1.2397	4.7000e-003	0.6903	1.2100e-003	0.6915	0.1842	1.1100e-003	0.1853		535.1615	535.1615	3.9500e-003	8.8600e-003	537.8996

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1063	0.9184	1.5877	8.2700e-003	0.8462	7.4500e-003	0.8536	0.2296	7.0800e-003	0.2367		915.8805	915.8805	0.0118	0.0646	935.4347
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3.6 Paving - 2050

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6431	2.8019	9.4422	0.0165		0.0712	0.0712		0.0712	0.0712		1,550.9712	1,550.9712	0.0565		1,552.3842
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6431	2.8019	9.4422	0.0165		0.0712	0.0712		0.0712	0.0712		1,550.9712	1,550.9712	0.0565		1,552.3842

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6000e-003	0.2405	9.1000e-004	0.1453	2.3000e-004	0.1455	0.0385	2.2000e-004	0.0388		103.8373	103.8373	7.7000e-004	1.7200e-003	104.3686
Total	0.0154	9.6000e-003	0.2405	9.1000e-004	0.1453	2.3000e-004	0.1455	0.0385	2.2000e-004	0.0388		103.8373	103.8373	7.7000e-004	1.7200e-003	104.3686

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6431	2.8019	9.4422	0.0165		0.0712	0.0712		0.0712	0.0712	0.0000	1,550.9712	1,550.9712	0.0565		1,552.3842
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6431</b>	<b>2.8019</b>	<b>9.4422</b>	<b>0.0165</b>		<b>0.0712</b>	<b>0.0712</b>		<b>0.0712</b>	<b>0.0712</b>	<b>0.0000</b>	<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0565</b>		<b>1,552.3842</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6000e-003	0.2405	9.1000e-004	0.1339	2.3000e-004	0.1342	0.0358	2.2000e-004	0.0360		103.8373	103.8373	7.7000e-004	1.7200e-003	104.3686
<b>Total</b>	<b>0.0154</b>	<b>9.6000e-003</b>	<b>0.2405</b>	<b>9.1000e-004</b>	<b>0.1339</b>	<b>2.3000e-004</b>	<b>0.1342</b>	<b>0.0358</b>	<b>2.2000e-004</b>	<b>0.0360</b>		<b>103.8373</b>	<b>103.8373</b>	<b>7.7000e-004</b>	<b>1.7200e-003</b>	<b>104.3686</b>

**3.7 Architectural Coating - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	29.4167					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>29.5316</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6000e-003	0.2405	9.1000e-004	0.1453	2.3000e-004	0.1455	0.0385	2.2000e-004	0.0388		103.8373	103.8373	7.7000e-004	1.7200e-003	104.3686
<b>Total</b>	<b>0.0154</b>	<b>9.6000e-003</b>	<b>0.2405</b>	<b>9.1000e-004</b>	<b>0.1453</b>	<b>2.3000e-004</b>	<b>0.1455</b>	<b>0.0385</b>	<b>2.2000e-004</b>	<b>0.0388</b>		<b>103.8373</b>	<b>103.8373</b>	<b>7.7000e-004</b>	<b>1.7200e-003</b>	<b>104.3686</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4167					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	29.5316	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6000e-003	0.2405	9.1000e-004	0.1339	2.3000e-004	0.1342	0.0358	2.2000e-004	0.0360		103.8373	103.8373	7.7000e-004	1.7200e-003	104.3686
<b>Total</b>	<b>0.0154</b>	<b>9.6000e-003</b>	<b>0.2405</b>	<b>9.1000e-004</b>	<b>0.1339</b>	<b>2.3000e-004</b>	<b>0.1342</b>	<b>0.0358</b>	<b>2.2000e-004</b>	<b>0.0360</b>		<b>103.8373</b>	<b>103.8373</b>	<b>7.7000e-004</b>	<b>1.7200e-003</b>	<b>104.3686</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 5 Mitigated**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	158.67	1000sqft	1.52	158,666.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Trips and VMT - See Construction Phase 5 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.64	1.52
tblTripsAndVMT	HaulingTripNumber	362.00	364.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblTripsAndVMT	VendorTripNumber	0.00	6.00
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**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	1.1846	7.8078	13.6591	0.0371	7.2328	0.1181	7.3238	3.4655	0.1172	3.5563	0.0000	3,637.3649	3,637.3649	0.1294	0.1404	3,682.4345
2050	29.5473	7.2532	13.4247	0.0317	0.9155	0.0714	0.9754	0.2466	0.0714	0.3061	0.0000	3,019.6921	3,019.6921	0.0967	0.0651	3,041.5003
<b>Maximum</b>	<b>29.5473</b>	<b>7.8078</b>	<b>13.6591</b>	<b>0.0371</b>	<b>7.2328</b>	<b>0.1181</b>	<b>7.3238</b>	<b>3.4655</b>	<b>0.1172</b>	<b>3.5563</b>	<b>0.0000</b>	<b>3,637.3649</b>	<b>3,637.3649</b>	<b>0.1294</b>	<b>0.1404</b>	<b>3,682.4345</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2049	1.1846	7.8078	13.6591	0.0371	3.1668	0.1181	3.2578	1.5020	0.1172	1.5929	0.0000	3,637.3649	3,637.3649	0.1294	0.1404	3,682.4345
2050	29.5473	7.2532	13.4247	0.0317	0.8462	0.0714	0.9061	0.2296	0.0714	0.2891	0.0000	3,019.6921	3,019.6921	0.0967	0.0651	3,041.5003
<b>Maximum</b>	<b>29.5473</b>	<b>7.8078</b>	<b>13.6591</b>	<b>0.0371</b>	<b>3.1668</b>	<b>0.1181</b>	<b>3.2578</b>	<b>1.5020</b>	<b>0.1172</b>	<b>1.5929</b>	<b>0.0000</b>	<b>3,637.3649</b>	<b>3,637.3649</b>	<b>0.1294</b>	<b>0.1404</b>	<b>3,682.4345</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>50.75</b>	<b>0.00</b>	<b>49.83</b>	<b>53.35</b>	<b>0.00</b>	<b>51.27</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/2/2049	8/27/2049	5	20	
2	Site Preparation	Site Preparation	8/28/2049	8/31/2049	5	2	
3	Grading	Grading	9/1/2049	9/6/2049	5	4	
4	Building Construction	Building Construction	9/7/2049	6/13/2050	5	200	
5	Paving	Paving	6/14/2050	6/27/2050	5	10	
6	Architectural Coating	Architectural Coating	6/28/2050	7/11/2050	5	10	

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 237,999; Non-Residential Outdoor: 79,333; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	364.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	67.00	26.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2049**

**Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					3.9203	0.0000	3.9203	0.5936	0.0000	0.5936			0.0000			0.0000

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-Road	1.1266	5.7269	12.7926	0.0281		0.0980	0.0980		0.0980	0.0980		2,662.1297	2,662.1297	0.0978		2,664.5757
<b>Total</b>	<b>1.1266</b>	<b>5.7269</b>	<b>12.7926</b>	<b>0.0281</b>	<b>3.9203</b>	<b>0.0980</b>	<b>4.0183</b>	<b>0.5936</b>	<b>0.0980</b>	<b>0.6915</b>		<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.0978</b>		<b>2,664.5757</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.9297	0.6096	7.5900e-003	0.3187	0.0189	0.3376	0.0874	0.0181	0.1055		821.5031	821.5031	0.0295	0.1300	860.9664
Vendor	3.8000e-003	0.1412	0.0558	5.5000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003		59.0860	59.0860	1.2700e-003	8.6600e-003	61.6975
Worker	0.0164	0.0101	0.2011	8.3000e-004	0.1453	2.5000e-004	0.1456	0.0385	2.3000e-004	0.0388		94.6461	94.6461	8.2000e-004	1.7700e-003	95.1949
<b>Total</b>	<b>0.0580</b>	<b>2.0809</b>	<b>0.8665</b>	<b>8.9700e-003</b>	<b>0.4896</b>	<b>0.0201</b>	<b>0.5097</b>	<b>0.1333</b>	<b>0.0193</b>	<b>0.1525</b>		<b>975.2352</b>	<b>975.2352</b>	<b>0.0316</b>	<b>0.1404</b>	<b>1,017.8588</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6759	0.0000	1.6759	0.2538	0.0000	0.2538			0.0000			0.0000
Off-Road	1.1266	5.7269	12.7926	0.0281		0.0980	0.0980		0.0980	0.0980	0.0000	2,662.1297	2,662.1297	0.0978		2,664.5757
<b>Total</b>	<b>1.1266</b>	<b>5.7269</b>	<b>12.7926</b>	<b>0.0281</b>	<b>1.6759</b>	<b>0.0980</b>	<b>1.7739</b>	<b>0.2538</b>	<b>0.0980</b>	<b>0.3517</b>	<b>0.0000</b>	<b>2,662.1297</b>	<b>2,662.1297</b>	<b>0.0978</b>		<b>2,664.5757</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.9297	0.6096	7.5900e-003	0.2970	0.0189	0.3159	0.0821	0.0181	0.1002		821.5031	821.5031	0.0295	0.1300	860.9664
Vendor	3.8000e-003	0.1412	0.0558	5.5000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.2000e-004	7.9000e-003		59.0860	59.0860	1.2700e-003	8.6600e-003	61.6975
Worker	0.0164	0.0101	0.2011	8.3000e-004	0.1339	2.5000e-004	0.1342	0.0358	2.3000e-004	0.0360		94.6461	94.6461	8.2000e-004	1.7700e-003	95.1949
<b>Total</b>	<b>0.0580</b>	<b>2.0809</b>	<b>0.8665</b>	<b>8.9700e-003</b>	<b>0.4549</b>	<b>0.0201</b>	<b>0.4751</b>	<b>0.1248</b>	<b>0.0193</b>	<b>0.1440</b>		<b>975.2352</b>	<b>975.2352</b>	<b>0.0316</b>	<b>0.1404</b>	<b>1,017.8588</b>

**3.3 Site Preparation - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.8008	2.6618	5.7438	0.0211		0.0750	0.0750		0.0750	0.0750		1,994.6929	1,994.6929	0.0705		1,996.4543
<b>Total</b>	<b>0.8008</b>	<b>2.6618</b>	<b>5.7438</b>	<b>0.0211</b>	<b>6.2662</b>	<b>0.0750</b>	<b>6.3412</b>	<b>3.0041</b>	<b>0.0750</b>	<b>3.0791</b>		<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0705</b>		<b>1,996.4543</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1412	0.0558	5.5000e-004	0.0256	9.7000e-004	0.0266	7.3800e-003	9.2000e-004	8.3000e-003	59.0860	59.0860	1.2700e-003	8.6600e-003	61.6975	
Worker	0.0101	6.2000e-003	0.1238	5.1000e-004	0.0894	1.5000e-004	0.0896	0.0237	1.4000e-004	0.0239	58.2438	58.2438	5.1000e-004	1.0900e-003	58.5815	
<b>Total</b>	<b>0.0139</b>	<b>0.1474</b>	<b>0.1796</b>	<b>1.0600e-003</b>	<b>0.1150</b>	<b>1.1200e-003</b>	<b>0.1162</b>	<b>0.0311</b>	<b>1.0600e-003</b>	<b>0.0322</b>	<b>117.3297</b>	<b>117.3297</b>	<b>1.7800e-003</b>	<b>9.7500e-003</b>	<b>120.2790</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6788	0.0000	2.6788	1.2843	0.0000	1.2843			0.0000			0.0000
Off-Road	0.8008	2.6618	5.7438	0.0211		0.0750	0.0750		0.0750	0.0750	0.0000	1,994.6929	1,994.6929	0.0705		1,996.4543
<b>Total</b>	<b>0.8008</b>	<b>2.6618</b>	<b>5.7438</b>	<b>0.0211</b>	<b>2.6788</b>	<b>0.0750</b>	<b>2.7538</b>	<b>1.2843</b>	<b>0.0750</b>	<b>1.3592</b>	<b>0.0000</b>	<b>1,994.6929</b>	<b>1,994.6929</b>	<b>0.0705</b>		<b>1,996.4543</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1412	0.0558	5.5000e-004	0.0240	9.7000e-004	0.0250	6.9800e-003	9.2000e-004	7.9000e-003	59.0860	59.0860	1.2700e-003	8.6600e-003	61.6975	

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Worker	0.0101	6.2000e-003	0.1238	5.1000e-004	0.0824	1.5000e-004	0.0826	0.0220	1.4000e-004	0.0221		58.2438	58.2438	5.1000e-004	1.0900e-003	58.5815
<b>Total</b>	<b>0.0139</b>	<b>0.1474</b>	<b>0.1796</b>	<b>1.0600e-003</b>	<b>0.1064</b>	<b>1.1200e-003</b>	<b>0.1075</b>	<b>0.0290</b>	<b>1.0600e-003</b>	<b>0.0300</b>		<b>117.3297</b>	<b>117.3297</b>	<b>1.7800e-003</b>	<b>9.7500e-003</b>	<b>120.2790</b>

**3.4 Grading - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	0.9764	3.5432	7.7686	0.0252		0.0893	0.0893		0.0893	0.0893		2,388.2741	2,388.2741	0.0857		2,390.4165
<b>Total</b>	<b>0.9764</b>	<b>3.5432</b>	<b>7.7686</b>	<b>0.0252</b>	<b>7.0826</b>	<b>0.0893</b>	<b>7.1719</b>	<b>3.4247</b>	<b>0.0893</b>	<b>3.5141</b>		<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.0857</b>		<b>2,390.4165</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-003	0.2118	0.0837	8.3000e-004	0.0384	1.4500e-003	0.0399	0.0111	1.3800e-003	0.0125		88.6289	88.6289	1.9000e-003	0.0130	92.5462
Worker	0.0126	7.7500e-003	0.1547	6.4000e-004	0.1118	1.9000e-004	0.1120	0.0296	1.7000e-004	0.0298		72.8047	72.8047	6.3000e-004	1.3600e-003	73.2288
<b>Total</b>	<b>0.0183</b>	<b>0.2196</b>	<b>0.2384</b>	<b>1.4700e-003</b>	<b>0.1502</b>	<b>1.6400e-003</b>	<b>0.1519</b>	<b>0.0407</b>	<b>1.5500e-003</b>	<b>0.0423</b>		<b>161.4336</b>	<b>161.4336</b>	<b>2.5300e-003</b>	<b>0.0144</b>	<b>165.7731</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	0.9764	3.5432	7.7686	0.0252		0.0893	0.0893		0.0893	0.0893	0.0000	2,388.2741	2,388.2741	0.0857		2,390.4165
<b>Total</b>	<b>0.9764</b>	<b>3.5432</b>	<b>7.7686</b>	<b>0.0252</b>	<b>3.0278</b>	<b>0.0893</b>	<b>3.1171</b>	<b>1.4641</b>	<b>0.0893</b>	<b>1.5534</b>	<b>0.0000</b>	<b>2,388.2741</b>	<b>2,388.2741</b>	<b>0.0857</b>		<b>2,390.4165</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-003	0.2118	0.0837	8.3000e-004	0.0360	1.4500e-003	0.0374	0.0105	1.3800e-003	0.0119		88.6289	88.6289	1.9000e-003	0.0130	92.5462
Worker	0.0126	7.7500e-003	0.1547	6.4000e-004	0.1030	1.9000e-004	0.1032	0.0275	1.7000e-004	0.0277		72.8047	72.8047	6.3000e-004	1.3600e-003	73.2268
<b>Total</b>	<b>0.0183</b>	<b>0.2196</b>	<b>0.2384</b>	<b>1.4700e-003</b>	<b>0.1390</b>	<b>1.6400e-003</b>	<b>0.1406</b>	<b>0.0380</b>	<b>1.5500e-003</b>	<b>0.0395</b>		<b>161.4336</b>	<b>161.4336</b>	<b>2.5300e-003</b>	<b>0.0144</b>	<b>165.7731</b>

**3.5 Building Construction - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525		2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>		<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0247	0.9178	0.3626	3.6000e-003	0.1666	6.2700e-003	0.1728	0.0480	6.0000e-003	0.0540		384.0587	384.0587	8.2400e-003	0.0563	401.0337
Worker	0.0845	0.0520	1.0366	4.3000e-003	0.7489	1.2700e-003	0.7502	0.1986	1.1700e-003	0.1998		487.7914	487.7914	4.2300e-003	9.1400e-003	490.6199
<b>Total</b>	<b>0.1092</b>	<b>0.9697</b>	<b>1.3992</b>	<b>7.9000e-003</b>	<b>0.9155</b>	<b>7.5400e-003</b>	<b>0.9230</b>	<b>0.2466</b>	<b>7.1700e-003</b>	<b>0.2537</b>		<b>871.8501</b>	<b>871.8501</b>	<b>0.0125</b>	<b>0.0654</b>	<b>891.6536</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525	0.0000	2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>	<b>0.0000</b>	<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0247	0.9178	0.3626	3.6000e-003	0.1559	6.2700e-003	0.1622	0.0453	6.0000e-003	0.0513		384.0587	384.0587	8.2400e-003	0.0563	401.0337
Worker	0.0845	0.0520	1.0366	4.3000e-003	0.6903	1.2700e-003	0.6916	0.1842	1.1700e-003	0.1854		487.7914	487.7914	4.2300e-003	9.1400e-003	490.6199
<b>Total</b>	<b>0.1092</b>	<b>0.9697</b>	<b>1.3992</b>	<b>7.9000e-003</b>	<b>0.8462</b>	<b>7.5400e-003</b>	<b>0.8537</b>	<b>0.2296</b>	<b>7.1700e-003</b>	<b>0.2367</b>		<b>871.8501</b>	<b>871.8501</b>	<b>0.0125</b>	<b>0.0654</b>	<b>891.6536</b>

**3.5 Building Construction - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525		2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>		<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0247	0.9191	0.3591	3.5800e-003	0.1666	6.2600e-003	0.1728	0.0480	5.9900e-003	0.0540	381.7632	381.7632	7.7700e-003	0.0560	398.6322	
Worker	0.0808	0.0518	1.0249	4.2600e-003	0.7489	1.2100e-003	0.7501	0.1986	1.1100e-003	0.1997	485.2712	485.2712	4.0700e-003	9.1200e-003	488.0894	
<b>Total</b>	<b>0.1054</b>	<b>0.9709</b>	<b>1.3840</b>	<b>7.8400e-003</b>	<b>0.9155</b>	<b>7.4700e-003</b>	<b>0.9229</b>	<b>0.2466</b>	<b>7.1000e-003</b>	<b>0.2537</b>	<b>867.0344</b>	<b>867.0344</b>	<b>0.0118</b>	<b>0.0651</b>	<b>886.7216</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9653	6.2823	12.0407	0.0238		0.0525	0.0525		0.0525	0.0525	0.0000	2,152.6577	2,152.6577	0.0848		2,154.7787
<b>Total</b>	<b>0.9653</b>	<b>6.2823</b>	<b>12.0407</b>	<b>0.0238</b>		<b>0.0525</b>	<b>0.0525</b>		<b>0.0525</b>	<b>0.0525</b>	<b>0.0000</b>	<b>2,152.6577</b>	<b>2,152.6577</b>	<b>0.0848</b>		<b>2,154.7787</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0247	0.9191	0.3591	3.5800e-003	0.1559	6.2600e-003	0.1621	0.0453	5.9900e-003	0.0513		381.7632	381.7632	7.7700e-003	0.0560	398.6322
Worker	0.0808	0.0518	1.0249	4.2600e-003	0.6903	1.2100e-003	0.6915	0.1842	1.1100e-003	0.1853		485.2712	485.2712	4.0700e-003	9.1200e-003	488.0894

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	0.1054	0.9709	1.3840	7.8400e-003	0.8462	7.4700e-003	0.8537	0.2296	7.1000e-003	0.2367		867.0344	867.0344	0.0118	0.0651	886.7216
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**3.6 Paving - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6431	2.8019	9.4422	0.0165		0.0712	0.0712		0.0712	0.0712		1,550.9712	1,550.9712	0.0565		1,552.3842
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6431</b>	<b>2.8019</b>	<b>9.4422</b>	<b>0.0165</b>		<b>0.0712</b>	<b>0.0712</b>		<b>0.0712</b>	<b>0.0712</b>		<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0565</b>		<b>1,552.3842</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0157	0.0100	0.1989	8.3000e-004	0.1453	2.3000e-004	0.1455	0.0385	2.2000e-004	0.0388		94.1571	94.1571	7.9000e-004	1.7700e-003	94.7039
<b>Total</b>	<b>0.0157</b>	<b>0.0100</b>	<b>0.1989</b>	<b>8.3000e-004</b>	<b>0.1453</b>	<b>2.3000e-004</b>	<b>0.1455</b>	<b>0.0385</b>	<b>2.2000e-004</b>	<b>0.0388</b>		<b>94.1571</b>	<b>94.1571</b>	<b>7.9000e-004</b>	<b>1.7700e-003</b>	<b>94.7039</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6431	2.8019	9.4422	0.0165		0.0712	0.0712		0.0712	0.0712	0.0000	1,550.9712	1,550.9712	0.0565		1,552.3842
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6431</b>	<b>2.8019</b>	<b>9.4422</b>	<b>0.0165</b>		<b>0.0712</b>	<b>0.0712</b>		<b>0.0712</b>	<b>0.0712</b>	<b>0.0000</b>	<b>1,550.9712</b>	<b>1,550.9712</b>	<b>0.0565</b>		<b>1,552.3842</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0157	0.0100	0.1989	8.3000e-004	0.1339	2.3000e-004	0.1342	0.0358	2.2000e-004	0.0360		94.1571	94.1571	7.9000e-004	1.7700e-003	94.7039
<b>Total</b>	<b>0.0157</b>	<b>0.0100</b>	<b>0.1989</b>	<b>8.3000e-004</b>	<b>0.1339</b>	<b>2.3000e-004</b>	<b>0.1342</b>	<b>0.0358</b>	<b>2.2000e-004</b>	<b>0.0360</b>		<b>94.1571</b>	<b>94.1571</b>	<b>7.9000e-004</b>	<b>1.7700e-003</b>	<b>94.7039</b>

**3.7 Architectural Coating - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	29.4167					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
<b>Total</b>	<b>29.5316</b>	<b>0.7270</b>	<b>1.7923</b>	<b>2.9700e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>7.4300e-003</b>	<b>7.4300e-003</b>		<b>281.4481</b>	<b>281.4481</b>	<b>9.9000e-003</b>		<b>281.6957</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0157	0.0100	0.1989	8.3000e-004	0.1453	2.3000e-004	0.1455	0.0385	2.2000e-004	0.0388		94.1571	94.1571	7.9000e-004	1.7700e-003	94.7039
<b>Total</b>	<b>0.0157</b>	<b>0.0100</b>	<b>0.1989</b>	<b>8.3000e-004</b>	<b>0.1453</b>	<b>2.3000e-004</b>	<b>0.1455</b>	<b>0.0385</b>	<b>2.2000e-004</b>	<b>0.0388</b>		<b>94.1571</b>	<b>94.1571</b>	<b>7.9000e-004</b>	<b>1.7700e-003</b>	<b>94.7039</b>

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4167					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	29.5316	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0157	0.0100	0.1989	8.3000e-004	0.1339	2.3000e-004	0.1342	0.0358	2.2000e-004	0.0360		94.1571	94.1571	7.9000e-004	1.7700e-003	94.7039
<b>Total</b>	<b>0.0157</b>	<b>0.0100</b>	<b>0.1989</b>	<b>8.3000e-004</b>	<b>0.1339</b>	<b>2.3000e-004</b>	<b>0.1342</b>	<b>0.0358</b>	<b>2.2000e-004</b>	<b>0.0360</b>		<b>94.1571</b>	<b>94.1571</b>	<b>7.9000e-004</b>	<b>1.7700e-003</b>	<b>94.7039</b>

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Construction Phase 5 Mitigated**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	158.67	1000sqft	1.52	158,666.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050

**Utility Company**

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Based on information provided by the College District.
- Trips and VMT - See Construction Phase 5 assumptions worksheet in the AQ/GHG appendix of the DEIR.
- Demolition -
- Architectural Coating - Mitigation
- Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	3.64	1.52
tblTripsAndVMT	HaulingTripNumber	362.00	364.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	VendorTripNumber	0.00	6.00
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2049	0.0595	0.3929	0.7249	1.7800e-003	0.1026	3.9600e-003	0.1066	0.0274	3.9300e-003	0.0313	0.0000	155.1330	155.1330	5.1100e-003	3.8100e-003	156.3955
2050	0.2127	0.4383	0.8394	1.9500e-003	0.0535	3.8700e-003	0.0574	0.0144	3.8500e-003	0.0183	0.0000	168.5387	168.5387	5.4000e-003	3.4500e-003	169.7020
Maximum	0.2127	0.4383	0.8394	1.9500e-003	0.1026	3.9600e-003	0.1066	0.0274	3.9300e-003	0.0313	0.0000	168.5387	168.5387	5.4000e-003	3.8100e-003	169.7020

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2049	0.0595	0.3929	0.7249	1.7800e-003	0.0652	3.9600e-003	0.0692	0.0176	3.9300e-003	0.0215	0.0000	155.1329	155.1329	5.1100e-003	3.8100e-003	156.3953
2050	0.2127	0.4383	0.8394	1.9500e-003	0.0495	3.8700e-003	0.0534	0.0135	3.8500e-003	0.0173	0.0000	168.5385	168.5385	5.4000e-003	3.4500e-003	169.7019
Maximum	0.2127	0.4383	0.8394	1.9500e-003	0.0652	3.9600e-003	0.0692	0.0176	3.9300e-003	0.0215	0.0000	168.5385	168.5385	5.4000e-003	3.8100e-003	169.7019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	26.51	0.00	25.24	25.84	0.00	21.81	0.00	0.00	0.00	0.00	0.00	0.00

**Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-2-2049	11-1-2049	0.2639	0.2639
2	11-2-2049	2-1-2050	0.2736	0.2736
3	2-2-2050	5-1-2050	0.2640	0.2640
4	5-2-2050	8-1-2050	0.2958	0.2958
		Highest	0.2958	0.2958

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/2/2049	8/27/2049	5	20	
2	Site Preparation	Site Preparation	8/28/2049	8/31/2049	5	2	
3	Grading	Grading	9/1/2049	9/6/2049	5	4	
4	Building Construction	Building Construction	9/7/2049	6/13/2050	5	200	
5	Paving	Paving	6/14/2050	6/27/2050	5	10	
6	Architectural Coating	Architectural Coating	6/28/2050	7/11/2050	5	10	

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 237,999; Non-Residential Outdoor: 79,333; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	364.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	67.00	26.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

**3.2 Demolition - 2049**

**Unmitigated Construction On-Site**

**Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0392	0.0000	0.0392	5.9400e-003	0.0000	5.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.0573	0.1279	2.8000e-004		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	24.1504	24.1504	8.9000e-004	0.0000	24.1726
<b>Total</b>	<b>0.0113</b>	<b>0.0573</b>	<b>0.1279</b>	<b>2.8000e-004</b>	<b>0.0392</b>	<b>9.8000e-004</b>	<b>0.0402</b>	<b>5.9400e-003</b>	<b>9.8000e-004</b>	<b>6.9200e-003</b>	<b>0.0000</b>	<b>24.1504</b>	<b>24.1504</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>24.1726</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-004	0.0193	6.0300e-003	8.0000e-005	3.1300e-003	1.9000e-004	3.3200e-003	8.6000e-004	1.8000e-004	1.0400e-003	0.0000	7.4452	7.4452	2.7000e-004	1.1800e-003	7.8029
Vendor	4.0000e-005	1.4000e-003	5.5000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.5352	0.5352	1.0000e-005	8.0000e-005	0.5588
Worker	1.5000e-004	1.1000e-004	2.1100e-003	1.0000e-005	1.4300e-003	0.0000	1.4300e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.8755	0.8755	1.0000e-005	2.0000e-005	0.8806
<b>Total</b>	<b>5.9000e-004</b>	<b>0.0208</b>	<b>8.6900e-003</b>	<b>1.0000e-004</b>	<b>4.8100e-003</b>	<b>2.0000e-004</b>	<b>5.0100e-003</b>	<b>1.3100e-003</b>	<b>1.9000e-004</b>	<b>1.5000e-003</b>	<b>0.0000</b>	<b>8.8558</b>	<b>8.8558</b>	<b>2.9000e-004</b>	<b>1.2800e-003</b>	<b>9.2423</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Fugitive Dust					0.0168	0.0000	0.0168	2.5400e-003	0.0000	2.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.0573	0.1279	2.8000e-004		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	24.1504	24.1504	8.9000e-004	0.0000	24.1726
<b>Total</b>	<b>0.0113</b>	<b>0.0573</b>	<b>0.1279</b>	<b>2.8000e-004</b>	<b>0.0168</b>	<b>9.8000e-004</b>	<b>0.0177</b>	<b>2.5400e-003</b>	<b>9.8000e-004</b>	<b>3.5200e-003</b>	<b>0.0000</b>	<b>24.1504</b>	<b>24.1504</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>24.1726</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-004	0.0193	6.0300e-003	8.0000e-005	2.9200e-003	1.9000e-004	3.1100e-003	8.1000e-004	1.8000e-004	9.9000e-004	0.0000	7.4452	7.4452	2.7000e-004	1.1800e-003	7.8029
Vendor	4.0000e-005	1.4000e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.5352	0.5352	1.0000e-005	8.0000e-005	0.5588
Worker	1.5000e-004	1.1000e-004	2.1100e-003	1.0000e-005	1.3100e-003	0.0000	1.3200e-003	3.5000e-004	0.0000	3.5000e-004	0.0000	0.8755	0.8755	1.0000e-005	2.0000e-005	0.8805
<b>Total</b>	<b>5.9000e-004</b>	<b>0.0208</b>	<b>8.6900e-003</b>	<b>1.0000e-004</b>	<b>4.4700e-003</b>	<b>2.0000e-004</b>	<b>4.6800e-003</b>	<b>1.2300e-003</b>	<b>1.9000e-004</b>	<b>1.4200e-003</b>	<b>0.0000</b>	<b>8.8558</b>	<b>8.8558</b>	<b>2.9000e-004</b>	<b>1.2800e-003</b>	<b>9.2423</b>

**3.3 Site Preparation - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	2.6600e-003	5.7400e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.8096	1.8096	6.0000e-005	0.0000	1.8112
<b>Total</b>	<b>8.0000e-004</b>	<b>2.6600e-003</b>	<b>5.7400e-003</b>	<b>2.0000e-005</b>	<b>6.2700e-003</b>	<b>7.0000e-005</b>	<b>6.3400e-003</b>	<b>3.0000e-003</b>	<b>7.0000e-005</b>	<b>3.0700e-003</b>	<b>0.0000</b>	<b>1.8096</b>	<b>1.8096</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.8112</b>



**Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0535	0.0535	0.0000	1.0000e-005	0.0559
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0539	0.0539	0.0000	0.0000	0.0542
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1074</b>	<b>0.1074</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1101</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6800e-003	0.0000	2.6800e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	2.6600e-003	5.7400e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.8096	1.8096	6.0000e-005	0.0000	1.8112
<b>Total</b>	<b>8.0000e-004</b>	<b>2.6600e-003</b>	<b>5.7400e-003</b>	<b>2.0000e-005</b>	<b>2.6800e-003</b>	<b>7.0000e-005</b>	<b>2.7500e-003</b>	<b>1.2800e-003</b>	<b>7.0000e-005</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>1.8096</b>	<b>1.8096</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.8112</b>

**Mitigated Construction Off-Site**

**Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.4000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0535	0.0535	0.0000	1.0000e-005	0.0559
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0539	0.0539	0.0000	0.0000	0.0542
<b>Total</b>	<b>1.0000e-005</b>	<b>1.5000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1074</b>	<b>0.1074</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1101</b>

**3.4 Grading - 2049**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	7.0900e-003	0.0155	5.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	4.3332	4.3332	1.6000e-004	0.0000	4.3371
<b>Total</b>	<b>1.9500e-003</b>	<b>7.0900e-003</b>	<b>0.0155</b>	<b>5.0000e-005</b>	<b>0.0142</b>	<b>1.8000e-004</b>	<b>0.0144</b>	<b>6.8500e-003</b>	<b>1.8000e-004</b>	<b>7.0300e-003</b>	<b>0.0000</b>	<b>4.3332</b>	<b>4.3332</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>4.3371</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.2000e-004	1.6000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1606	0.1606	0.0000	2.0000e-005	0.1677
Worker	2.0000e-005	2.0000e-005	3.2000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1347	0.1347	0.0000	0.0000	0.1355
<b>Total</b>	<b>3.0000e-005</b>	<b>4.4000e-004</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.2953</b>	<b>0.2953</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.3031</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0600e-003	0.0000	6.0600e-003	2.9300e-003	0.0000	2.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	7.0900e-003	0.0155	5.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	4.3332	4.3332	1.6000e-004	0.0000	4.3371
<b>Total</b>	<b>1.9500e-003</b>	<b>7.0900e-003</b>	<b>0.0155</b>	<b>5.0000e-005</b>	<b>6.0600e-003</b>	<b>1.8000e-004</b>	<b>6.2400e-003</b>	<b>2.9300e-003</b>	<b>1.8000e-004</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>4.3332</b>	<b>4.3332</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>4.3371</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.2000e-004	1.6000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1606	0.1606	0.0000	2.0000e-005	0.1677
Worker	2.0000e-005	2.0000e-005	3.2000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1347	0.1347	0.0000	0.0000	0.1355

Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	3.0000e-005	4.4000e-004	4.8000e-004	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2953	0.2953	0.0000	2.0000e-005	0.3031
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3.5 Building Construction - 2049

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0405	0.2639	0.5057	1.0000e-003		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	82.0200	82.0200	3.2300e-003	0.0000	82.1009
<b>Total</b>	<b>0.0405</b>	<b>0.2639</b>	<b>0.5057</b>	<b>1.0000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>	<b>0.0000</b>	<b>82.0200</b>	<b>82.0200</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>82.1009</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0900e-003	0.0383	0.0150	1.5000e-004	6.8900e-003	2.6000e-004	7.1500e-003	1.9900e-003	2.5000e-004	2.2400e-003	0.0000	14.6105	14.6105	3.2000e-004	2.1400e-003	15.2564
Worker	3.2200e-003	2.2800e-003	0.0457	1.8000e-004	0.0309	5.0000e-005	0.0309	8.1900e-003	5.0000e-005	8.2400e-003	0.0000	18.9508	18.9508	1.6000e-004	3.6000e-004	19.0619
<b>Total</b>	<b>4.3100e-003</b>	<b>0.0406</b>	<b>0.0606</b>	<b>3.3000e-004</b>	<b>0.0377</b>	<b>3.1000e-004</b>	<b>0.0381</b>	<b>0.0102</b>	<b>3.0000e-004</b>	<b>0.0105</b>	<b>0.0000</b>	<b>33.5613</b>	<b>33.5613</b>	<b>4.8000e-004</b>	<b>2.5000e-003</b>	<b>34.3182</b>

Mitigated Construction On-Site

**Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0405	0.2639	0.5057	1.0000e-003		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	82.0200	82.0200	3.2300e-003	0.0000	82.1008
<b>Total</b>	<b>0.0405</b>	<b>0.2639</b>	<b>0.5057</b>	<b>1.0000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>	<b>0.0000</b>	<b>82.0200</b>	<b>82.0200</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>82.1008</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0900e-003	0.0383	0.0150	1.5000e-004	6.4500e-003	2.6000e-004	6.7100e-003	1.8800e-003	2.5000e-004	2.1300e-003	0.0000	14.6105	14.6105	3.2000e-004	2.1400e-003	15.2564
Worker	3.2200e-003	2.2800e-003	0.0457	1.8000e-004	0.0285	5.0000e-005	0.0285	7.6000e-003	5.0000e-005	7.6500e-003	0.0000	18.9508	18.9508	1.6000e-004	3.6000e-004	19.0619
<b>Total</b>	<b>4.3100e-003</b>	<b>0.0406</b>	<b>0.0606</b>	<b>3.3000e-004</b>	<b>0.0349</b>	<b>3.1000e-004</b>	<b>0.0352</b>	<b>9.4800e-003</b>	<b>3.0000e-004</b>	<b>9.7800e-003</b>	<b>0.0000</b>	<b>33.5613</b>	<b>33.5613</b>	<b>4.8000e-004</b>	<b>2.5000e-003</b>	<b>34.3182</b>

**3.5 Building Construction - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0560	0.3644	0.6984	1.3800e-003		3.0400e-003	3.0400e-003		3.0400e-003	3.0400e-003	0.0000	113.2658	113.2658	4.4600e-003	0.0000	113.3774

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	0.0560	0.3644	0.6984	1.3800e-003		3.0400e-003	3.0400e-003		3.0400e-003	3.0400e-003	0.0000	113.2658	113.2658	4.4600e-003	0.0000	113.3774
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**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-003	0.0530	0.0205	2.1000e-004	9.5100e-003	3.6000e-004	9.8700e-003	2.7400e-003	3.5000e-004	3.0900e-003	0.0000	20.0553	20.0553	4.1000e-004	2.9400e-003	20.9416
Worker	4.2400e-003	3.1300e-003	0.0623	2.5000e-004	0.0426	7.0000e-005	0.0427	0.0113	6.0000e-005	0.0114	0.0000	26.0349	26.0349	2.2000e-004	4.9000e-004	26.1877
<b>Total</b>	<b>5.7400e-003</b>	<b>0.0561</b>	<b>0.0828</b>	<b>4.6000e-004</b>	<b>0.0521</b>	<b>4.3000e-004</b>	<b>0.0526</b>	<b>0.0141</b>	<b>4.1000e-004</b>	<b>0.0145</b>	<b>0.0000</b>	<b>46.0902</b>	<b>46.0902</b>	<b>6.3000e-004</b>	<b>3.4300e-003</b>	<b>47.1293</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0560	0.3644	0.6984	1.3800e-003		3.0400e-003	3.0400e-003		3.0400e-003	3.0400e-003	0.0000	113.2656	113.2656	4.4600e-003	0.0000	113.3772
<b>Total</b>	<b>0.0560</b>	<b>0.3644</b>	<b>0.6984</b>	<b>1.3800e-003</b>		<b>3.0400e-003</b>	<b>3.0400e-003</b>		<b>3.0400e-003</b>	<b>3.0400e-003</b>	<b>0.0000</b>	<b>113.2656</b>	<b>113.2656</b>	<b>4.4600e-003</b>	<b>0.0000</b>	<b>113.3772</b>

**Mitigated Construction Off-Site**

**Construction Phase 5 Mitigated - San Bernardino-South Coast County, Annual  
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-003	0.0530	0.0205	2.1000e-004	8.9000e-003	3.6000e-004	9.2700e-003	2.6000e-003	3.5000e-004	2.9400e-003	0.0000	20.0553	20.0553	4.1000e-004	2.9400e-003	20.9416
Worker	4.2400e-003	3.1300e-003	0.0623	2.5000e-004	0.0393	7.0000e-005	0.0394	0.0105	6.0000e-005	0.0106	0.0000	26.0349	26.0349	2.2000e-004	4.9000e-004	26.1877
<b>Total</b>	<b>5.7400e-003</b>	<b>0.0561</b>	<b>0.0828</b>	<b>4.6000e-004</b>	<b>0.0482</b>	<b>4.3000e-004</b>	<b>0.0486</b>	<b>0.0131</b>	<b>4.1000e-004</b>	<b>0.0135</b>	<b>0.0000</b>	<b>46.0902</b>	<b>46.0902</b>	<b>6.3000e-004</b>	<b>3.4300e-003</b>	<b>47.1293</b>

**3.6 Paving - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0140	0.0472	8.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	7.0351	7.0351	2.6000e-004	0.0000	7.0415
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.2200e-003</b>	<b>0.0140</b>	<b>0.0472</b>	<b>8.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>7.0351</b>	<b>7.0351</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>7.0415</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	1.0400e-003	0.0000	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4355	0.4355	0.0000	1.0000e-005	0.4380
<b>Total</b>	<b>7.0000e-005</b>	<b>5.0000e-005</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.4355</b>	<b>0.4355</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.4380</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0140	0.0472	8.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	7.0351	7.0351	2.6000e-004	0.0000	7.0415
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.2200e-003</b>	<b>0.0140</b>	<b>0.0472</b>	<b>8.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>7.0351</b>	<b>7.0351</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>7.0415</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	1.0400e-003	0.0000	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4355	0.4355	0.0000	1.0000e-005	0.4380



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Total	7.0000e-005	5.0000e-005	1.0400e-003	0.0000	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4355	0.4355	0.0000	1.0000e-005	0.4380
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**3.7 Architectural Coating - 2050**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1471					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	3.6400e-003	8.9600e-003	1.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	1.2766	1.2766	4.0000e-005	0.0000	1.2778
<b>Total</b>	<b>0.1477</b>	<b>3.6400e-003</b>	<b>8.9600e-003</b>	<b>1.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.2778</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	1.0400e-003	0.0000	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4355	0.4355	0.0000	1.0000e-005	0.4380
<b>Total</b>	<b>7.0000e-005</b>	<b>5.0000e-005</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.4355</b>	<b>0.4355</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.4380</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1471					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	3.6400e-003	8.9600e-003	1.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	1.2766	1.2766	4.0000e-005	0.0000	1.2778
<b>Total</b>	<b>0.1477</b>	<b>3.6400e-003</b>	<b>8.9600e-003</b>	<b>1.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.2778</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	1.0400e-003	0.0000	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4355	0.4355	0.0000	1.0000e-005	0.4380
<b>Total</b>	<b>7.0000e-005</b>	<b>5.0000e-005</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>6.6000e-004</b>	<b>0.0000</b>	<b>6.6000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>0.4355</b>	<b>0.4355</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.4380</b>

**Construction Phase 5 Mitigated**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	1	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

**Construction Phase 5 Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	5.70000E-004	3.64000E-003	8.96000E-003	1.00000E-005	4.00000E-005	4.00000E-005	0.00000E+000	1.27663E+000	1.27663E+000	4.00000E-005	0.00000E+000	1.27775E+000
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Concrete/Industrial Saws	2.03000E-003	1.49500E-002	3.62600E-002	6.00000E-005	1.40000E-004	1.40000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.60000E-004	0.00000E+000	5.38058E+000
Cranes	1.72800E-002	3.04800E-002	1.01370E-001	5.30000E-004	1.15000E-003	1.15000E-003	0.00000E+000	4.56844E+001	4.56844E+001	1.37000E-003	0.00000E+000	4.57186E+001
Forklifts	6.50000E-003	3.51100E-002	8.93300E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Generator Sets	1.66600E-002	1.53370E-001	3.62660E-001	6.60000E-004	1.32000E-003	1.32000E-003	0.00000E+000	5.65208E+001	5.65208E+001	1.29000E-003	0.00000E+000	5.65531E+001
Graders	7.60000E-004	1.46000E-003	4.60000E-003	2.00000E-005	5.00000E-005	5.00000E-005	0.00000E+000	2.09143E+000	2.09143E+000	6.00000E-005	0.00000E+000	2.09300E+000
Pavers	7.70000E-004	2.11000E-003	1.19900E-002	2.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	1.86175E+000	1.86175E+000	6.00000E-005	0.00000E+000	1.86330E+000
Paving Equipment	8.60000E-004	2.25000E-003	1.38500E-002	3.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	2.16045E+000	2.16045E+000	7.00000E-005	0.00000E+000	2.16216E+000
Rollers	5.60000E-004	3.58000E-003	8.50000E-003	1.00000E-005	5.00000E-005	5.00000E-005	0.00000E+000	1.20934E+000	1.20934E+000	4.00000E-005	0.00000E+000	1.21046E+000
Rubber Tired Dozers	5.68000E-003	1.81700E-002	2.74800E-002	1.30000E-004	7.00000E-004	7.00000E-004	0.00000E+000	1.15665E+001	1.15665E+001	4.50000E-004	0.00000E+000	1.15777E+001
Tractors/Loaders/Bulldozers	1.84100E-002	1.07630E-001	2.68380E-001	4.30000E-004	1.16000E-003	1.16000E-003	0.00000E+000	3.73659E+001	3.73659E+001	1.45000E-003	0.00000E+000	3.74021E+001
Welders	4.40300E-002	3.38760E-001	4.74900E-001	7.70000E-004	1.64000E-003	1.64000E-003	0.00000E+000	5.64663E+001	5.64663E+001	3.58000E-003	0.00000E+000	5.65557E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	5.70000E-004	3.64000E-003	8.96000E-003	1.00000E-005	4.00000E-005	4.00000E-005	0.00000E+000	1.27663E+000	1.27663E+000	4.00000E-005	0.00000E+000	1.27775E+000
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Concrete/Industrial Saws	2.03000E-003	1.49500E-002	3.62600E-002	6.00000E-005	1.40000E-004	1.40000E-004	0.00000E+000	5.37656E+000	5.37656E+000	1.60000E-004	0.00000E+000	5.38058E+000
Cranes	1.72800E-002	3.04800E-002	1.01370E-001	5.30000E-004	1.15000E-003	1.15000E-003	0.00000E+000	4.56844E+001	4.56844E+001	1.37000E-003	0.00000E+000	4.57185E+001
Forklifts	6.50000E-003	3.51100E-002	8.93300E-002	1.40000E-004	3.80000E-004	3.80000E-004	0.00000E+000	1.21389E+001	1.21389E+001	5.10000E-004	0.00000E+000	1.21517E+001
Generator Sets	1.66600E-002	1.53370E-001	3.62660E-001	6.60000E-004	1.32000E-003	1.32000E-003	0.00000E+000	5.65207E+001	5.65207E+001	1.29000E-003	0.00000E+000	5.65530E+001
Graders	7.60000E-004	1.46000E-003	4.60000E-003	2.00000E-005	5.00000E-005	5.00000E-005	0.00000E+000	2.09143E+000	2.09143E+000	6.00000E-005	0.00000E+000	2.09299E+000
Pavers	7.70000E-004	2.11000E-003	1.19900E-002	2.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	1.86175E+000	1.86175E+000	6.00000E-005	0.00000E+000	1.86330E+000
Paving Equipment	8.60000E-004	2.25000E-003	1.38500E-002	3.00000E-005	1.00000E-004	1.00000E-004	0.00000E+000	2.16044E+000	2.16044E+000	7.00000E-005	0.00000E+000	2.16215E+000
Rollers	5.60000E-004	3.58000E-003	8.50000E-003	1.00000E-005	5.00000E-005	5.00000E-005	0.00000E+000	1.20934E+000	1.20934E+000	4.00000E-005	0.00000E+000	1.21046E+000
Rubber Tired Dozers	5.68000E-003	1.81700E-002	2.74800E-002	1.30000E-004	7.00000E-004	7.00000E-004	0.00000E+000	1.15665E+001	1.15665E+001	4.50000E-004	0.00000E+000	1.15777E+001

**Construction Phase 5 Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Tractors/Loaders/Bac hoes	1.84100E-002	1.07630E-001	2.68380E-001	4.30000E-004	1.16000E-003	1.16000E-003	0.00000E+000	3.73659E+001	3.73659E+001	1.45000E-003	0.00000E+000	3.74021E+001
Welders	4.40300E-002	3.38760E-001	4.74900E-001	7.70000E-004	1.64000E-003	1.64000E-003	0.00000E+000	5.64662E+001	5.64662E+001	3.58000E-003	0.00000E+000	5.65556E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.09447E-006	1.09447E-006	0.00000E+000	0.00000E+000	1.09365E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64760E-006	1.64760E-006	0.00000E+000	0.00000E+000	8.22931E-007
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23848E-006	1.23848E-006	0.00000E+000	0.00000E+000	1.23778E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.77783E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.62867E-006	4.62867E-006	0.00000E+000	0.00000E+000	4.62500E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.72913E-006	1.72913E-006	0.00000E+000	0.00000E+000	8.63732E-007
Tractors/Loaders/Bac hoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07049E-006	1.07049E-006	0.00000E+000	0.00000E+000	1.06946E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23968E-006	1.23968E-006	0.00000E+000	0.00000E+000	1.23772E-006

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		

**Construction Phase 5 Mitigated**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Yes	Clean Paved Road	% PM Reduction	9.00				
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Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.07	0.05
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.09	0.02	0.08	0.02	0.08	0.07
Demolition	Fugitive Dust	0.04	0.01	0.02	0.00	0.57	0.57
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.06
Grading	Fugitive Dust	0.01	0.01	0.01	0.00	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.10	0.13
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.07	0.05
Site Preparation	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.17	0.00

# CalEEMod Output: Existing 2021 Operation

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Existing 2021 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**Existing 2021**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	588.48	1000sqft	200.00	588,479.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity factor based on SCE 20202 Sustainability Report

Land Use - Based on the project description.

Construction Phase -

Vehicle Trips - Based on information provided by the traffic consultant and the default weekend trip rates.

Fleet Mix - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Energy Use -

Water And Wastewater - See modeling assumptions file in the AQ/GHG appendix for details. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.53	0.55
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.3610e-003	7.6350e-003
tblFleetMix	MCY	0.03	0.03

Existing 2021 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	MDV	0.14	0.15
tblFleetMix	MH	5.6010e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	5.8000e-004	0.00
tblFleetMix	SBUS	9.5500e-004	0.00
tblFleetMix	UBUS	2.6000e-004	0.00
tblLandUse	LotAcreage	13.51	200.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	765.02	3,007.00
tblVehicleTrips	ST_TR	11.23	17.89
tblVehicleTrips	SU_TR	1.21	1.93
tblVehicleTrips	WD_TR	20.25	32.26
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	28,864,374.65	35,270,834.00
tblWater	OutdoorWaterUseRate	45,146,842.39	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational  
Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	70.4144	63.8952	671.4847	1.2132	119.9774	0.8024	120.7798	31.8577	0.7453	32.6031		123,057.4984	123,057.4984	7.2087	4.5665	124,598.5315
<b>Total</b>	<b>83.8582</b>	<b>66.5481</b>	<b>673.7730</b>	<b>1.2291</b>	<b>119.9774</b>	<b>1.0042</b>	<b>120.9816</b>	<b>31.8577</b>	<b>0.9471</b>	<b>32.8049</b>		<b>126,240.4403</b>	<b>126,240.4403</b>	<b>7.2701</b>	<b>4.6248</b>	<b>127,800.3958</b>

Existing 2021 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	70.4144	63.8952	671.4847	1.2132	119.9774	0.8024	120.7798	31.8577	0.7453	32.6031		123,057.4984	123,057.4984	7.2087	4.5665	124,598.5315
<b>Total</b>	<b>83.8582</b>	<b>66.5481</b>	<b>673.7730</b>	<b>1.2291</b>	<b>119.9774</b>	<b>1.0042</b>	<b>120.9816</b>	<b>31.8577</b>	<b>0.9471</b>	<b>32.8049</b>		<b>126,240.4403</b>	<b>126,240.4403</b>	<b>7.2701</b>	<b>4.6248</b>	<b>127,800.3958</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	70.4144	63.8952	671.4847	1.2132	119.9774	0.8024	120.7798	31.8577	0.7453	32.6031		123,057.4984	123,057.4984	7.2087	4.5665	124,598.5315
Unmitigated	70.4144	63.8952	671.4847	1.2132	119.9774	0.8024	120.7798	31.8577	0.7453	32.6031		123,057.4984	123,057.4984	7.2087	4.5665	124,598.5315

Existing 2021 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,981.98	10,526.83	1134.23	45,983,210	45,983,210
Total	18,981.98	10,526.83	1,134.23	45,983,210	45,983,210

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.550278	0.057440	0.178158	0.149745	0.029537	0.007635	0.000211	0.000316	0.000000	0.000000	0.026680	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
NaturalGas Unmitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270

5.2 Energy by Land Use - NaturalGas  
Unmitigated

Existing 2021 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	27053.9	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
<b>Total</b>		<b>0.2918</b>	<b>2.6523</b>	<b>2.2280</b>	<b>0.0159</b>		<b>0.2016</b>	<b>0.2016</b>		<b>0.2016</b>	<b>0.2016</b>		<b>3,182.8131</b>	<b>3,182.8131</b>	<b>0.0610</b>	<b>0.0584</b>	<b>3,201.7270</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	27.0539	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
<b>Total</b>		<b>0.2918</b>	<b>2.6523</b>	<b>2.2280</b>	<b>0.0159</b>		<b>0.2016</b>	<b>0.2016</b>		<b>0.2016</b>	<b>0.2016</b>		<b>3,182.8131</b>	<b>3,182.8131</b>	<b>0.0610</b>	<b>0.0584</b>	<b>3,201.7270</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
Unmitigated	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373

Existing 2021 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6300e-003	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
<b>Total</b>	<b>13.1521</b>	<b>5.5000e-004</b>	<b>0.0603</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.4000e-004</b>		<b>0.1373</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6300e-003	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
<b>Total</b>	<b>13.1521</b>	<b>5.5000e-004</b>	<b>0.0603</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.4000e-004</b>		<b>0.1373</b>

Existing 2021 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Existing 2021 - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**Existing 2021**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	588.48	1000sqft	200.00	588,479.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity factor based on SCE 20202 Sustainability Report

Land Use - Based on the project description.

Construction Phase -

Vehicle Trips - Based on information provided by the traffic consultant and the default weekend trip rates.

Fleet Mix - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Energy Use -

Water And Wastewater - See modeling assumptions file in the AQ/GHG appendix for details. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.53	0.55
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.3610e-003	7.6350e-003
tblFleetMix	MCY	0.03	0.03



Existing 2021 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	MDV	0.14	0.15
tblFleetMix	MH	5.6010e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	5.8000e-004	0.00
tblFleetMix	SBUS	9.5500e-004	0.00
tblFleetMix	UBUS	2.6000e-004	0.00
tblLandUse	LotAcreage	13.51	200.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	765.02	3,007.00
tblVehicleTrips	ST_TR	11.23	17.89
tblVehicleTrips	SU_TR	1.21	1.93
tblVehicleTrips	WD_TR	20.25	32.26
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	28,864,374.65	35,270,834.00
tblWater	OutdoorWaterUseRate	45,146,842.39	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational  
Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	61.3647	67.9235	595.1865	1.1124	119.9774	0.8025	120.7799	31.8577	0.7454	32.6031		112,851.4400	112,851.4400	7.4321	4.7367	114,448.7798
<b>Total</b>	<b>74.8085</b>	<b>70.5764</b>	<b>597.4748</b>	<b>1.1283</b>	<b>119.9774</b>	<b>1.0043</b>	<b>120.9817</b>	<b>31.8577</b>	<b>0.9472</b>	<b>32.8049</b>		<b>116,034.3818</b>	<b>116,034.3818</b>	<b>7.4935</b>	<b>4.7951</b>	<b>117,650.6441</b>

Existing 2021 - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	61.3647	67.9235	595.1865	1.1124	119.9774	0.8025	120.7799	31.8577	0.7454	32.6031		112,851.4400	112,851.4400	7.4321	4.7367	114,448.7798
<b>Total</b>	<b>74.8085</b>	<b>70.5764</b>	<b>597.4748</b>	<b>1.1283</b>	<b>119.9774</b>	<b>1.0043</b>	<b>120.9817</b>	<b>31.8577</b>	<b>0.9472</b>	<b>32.8049</b>		<b>116,034.3818</b>	<b>116,034.3818</b>	<b>7.4935</b>	<b>4.7951</b>	<b>117,650.6441</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	61.3647	67.9235	595.1865	1.1124	119.9774	0.8025	120.7799	31.8577	0.7454	32.6031		112,851.4400	112,851.4400	7.4321	4.7367	114,448.7798
Unmitigated	61.3647	67.9235	595.1865	1.1124	119.9774	0.8025	120.7799	31.8577	0.7454	32.6031		112,851.4400	112,851.4400	7.4321	4.7367	114,448.7798

Existing 2021 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,981.98	10,526.83	1134.23	45,983,210	45,983,210
Total	18,981.98	10,526.83	1,134.23	45,983,210	45,983,210

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.550278	0.057440	0.178158	0.149745	0.029537	0.007635	0.000211	0.000316	0.000000	0.000000	0.026680	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
NaturalGas Mitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
NaturalGas Unmitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Junior College (2yr)	27053.9	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Total		0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270

Existing 2021 - San Bernardino-South Coast County, Winter  
 EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	27.0539	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
<b>Total</b>		<b>0.2918</b>	<b>2.6523</b>	<b>2.2280</b>	<b>0.0159</b>		<b>0.2016</b>	<b>0.2016</b>		<b>0.2016</b>	<b>0.2016</b>		<b>3,182.8131</b>	<b>3,182.8131</b>	<b>0.0610</b>	<b>0.0584</b>	<b>3,201.7270</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
Unmitigated	13.1521	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6300e-003	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
<b>Total</b>	<b>13.1521</b>	<b>5.5000e-004</b>	<b>0.0603</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.4000e-004</b>		<b>0.1373</b>

Existing 2021 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6300e-003	5.5000e-004	0.0603	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1288	0.1288	3.4000e-004		0.1373
<b>Total</b>	<b>13.1521</b>	<b>5.5000e-004</b>	<b>0.0603</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.4000e-004</b>		<b>0.1373</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

Existing 2021 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**Existing 2021**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	588.48	1000sqft	200.00	588,479.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity factor based on SCE 20202 Sustainability Report

Land Use - Based on the project description.

Construction Phase -

Vehicle Trips - Based on information provided by the traffic consultant and the default weekend trip rates.

Fleet Mix - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Energy Use -

Water And Wastewater - See modeling assumptions file in the AQ/GHG appendix for details. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.53	0.55
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.3610e-003	7.6350e-003
tblFleetMix	MCY	0.03	0.03

Existing 2021 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	MDV	0.14	0.15
tblFleetMix	MH	5.6010e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	5.8000e-004	0.00
tblFleetMix	SBUS	9.5500e-004	0.00
tblFleetMix	UBUS	2.6000e-004	0.00
tblLandUse	LotAcreage	13.51	200.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	765.02	3,007.00
tblVehicleTrips	ST_TR	11.23	17.89
tblVehicleTrips	SU_TR	1.21	1.93
tblVehicleTrips	WD_TR	20.25	32.26
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	28,864,374.65	35,270,834.00
tblWater	OutdoorWaterUseRate	45,146,842.39	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational  
Unmitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	2.3999	7.0000e-005	7.5400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
Energy	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	1,809.2832	1,809.2832	0.0931	0.0197	1,817.4863
Mobile	8.8758	10.2356	90.7258	0.1650	17.1803	0.1170	17.2973	4.5686	0.1087	4.6773	0.0000	15,186.7886	15,186.7886	0.9965	0.6415	15,402.8714
Waste						0.0000	0.0000		0.0000	0.0000	610.3938	0.0000	610.3938	36.0732	0.0000	1,512.2249
Water						0.0000	0.0000		0.0000	0.0000	12.4789	248.0283	260.5072	0.0590	0.0291	270.6489
<b>Total</b>	<b>11.3290</b>	<b>10.7197</b>	<b>91.1400</b>	<b>0.1679</b>	<b>17.1803</b>	<b>0.1538</b>	<b>17.3341</b>	<b>4.5686</b>	<b>0.1455</b>	<b>4.7141</b>	<b>622.8727</b>	<b>17,244.1147</b>	<b>17,866.9874</b>	<b>37.2218</b>	<b>0.6903</b>	<b>19,003.2470</b>

Existing 2021 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.3999	7.0000e-005	7.5400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
Energy	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	1,809.2832	1,809.2832	0.0931	0.0197	1,817.4863
Mobile	8.8758	10.2356	90.7258	0.1650	17.1803	0.1170	17.2973	4.5686	0.1087	4.6773	0.0000	15,186.7886	15,186.7886	0.9965	0.6415	15,402.8714
Waste						0.0000	0.0000		0.0000	0.0000	610.3938	0.0000	610.3938	36.0732	0.0000	1,512.2249
Water						0.0000	0.0000		0.0000	0.0000	12.4789	248.0283	260.5072	0.0590	0.0291	270.6489
<b>Total</b>	<b>11.3290</b>	<b>10.7197</b>	<b>91.1400</b>	<b>0.1679</b>	<b>17.1803</b>	<b>0.1538</b>	<b>17.3341</b>	<b>4.5686</b>	<b>0.1455</b>	<b>4.7141</b>	<b>622.8727</b>	<b>17,244.1147</b>	<b>17,866.9874</b>	<b>37.2218</b>	<b>0.6903</b>	<b>19,003.2470</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.8758	10.2356	90.7258	0.1650	17.1803	0.1170	17.2973	4.5686	0.1087	4.6773	0.0000	15,186.7886	15,186.7886	0.9965	0.6415	15,402.8714
Unmitigated	8.8758	10.2356	90.7258	0.1650	17.1803	0.1170	17.2973	4.5686	0.1087	4.6773	0.0000	15,186.7886	15,186.7886	0.9965	0.6415	15,402.8714



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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,981.98	10,526.83	1134.23	45,983,210	45,983,210
Total	18,981.98	10,526.83	1,134.23	45,983,210	45,983,210

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.550278	0.057440	0.178158	0.149745	0.029537	0.007635	0.000211	0.000316	0.000000	0.000000	0.026680	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,282.3328	1,282.3328	0.0830	0.0101	1,287.4045
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,282.3328	1,282.3328	0.0830	0.0101	1,287.4045
NaturalGas Mitigated	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818
NaturalGas Unmitigated	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	9.87468e+006	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818
<b>Total</b>		<b>0.0533</b>	<b>0.4841</b>	<b>0.4066</b>	<b>2.9000e-003</b>		<b>0.0368</b>	<b>0.0368</b>		<b>0.0368</b>	<b>0.0368</b>	<b>0.0000</b>	<b>526.9504</b>	<b>526.9504</b>	<b>0.0101</b>	<b>9.6600e-003</b>	<b>530.0818</b>

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	9.87468e+006	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818
<b>Total</b>		<b>0.0533</b>	<b>0.4841</b>	<b>0.4066</b>	<b>2.9000e-003</b>		<b>0.0368</b>	<b>0.0368</b>		<b>0.0368</b>	<b>0.0368</b>	<b>0.0000</b>	<b>526.9504</b>	<b>526.9504</b>	<b>0.0101</b>	<b>9.6600e-003</b>	<b>530.0818</b>

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	5.54347e+006	1,282.3328	0.0830	0.0101	1,287.4045
<b>Total</b>		<b>1,282.3328</b>	<b>0.0830</b>	<b>0.0101</b>	<b>1,287.4045</b>

Existing 2021 - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	5.54347e+006	1,282.3328	0.0830	0.0101	1,287.4045
<b>Total</b>		<b>1,282.3328</b>	<b>0.0830</b>	<b>0.0101</b>	<b>1,287.4045</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.3999	7.0000e-005	7.5400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
Unmitigated	2.3999	7.0000e-005	7.5400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2728					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-004	7.0000e-005	7.5400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
<b>Total</b>	<b>2.3999</b>	<b>7.0000e-005</b>	<b>7.5400e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0146</b>	<b>0.0146</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0156</b>

Existing 2021 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.2728					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-004	7.0000e-005	7.5400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156	
<b>Total</b>	<b>2.3999</b>	<b>7.0000e-005</b>	<b>7.5400e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0146</b>	<b>0.0146</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0156</b>	

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	260.5072	0.0590	0.0291	270.6489
Unmitigated	260.5072	0.0590	0.0291	270.6489

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	35.2708 / 55.1714	260.5072	0.0590	0.0291	270.6489
<b>Total</b>		<b>260.5072</b>	<b>0.0590</b>	<b>0.0291</b>	<b>270.6489</b>

Existing 2021 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated**

Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	35.2708 / 55.1714	260.5072	0.0590	0.0291	270.6489
<b>Total</b>		<b>260.5072</b>	<b>0.0590</b>	<b>0.0291</b>	<b>270.6489</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	610.3938	36.0732	0.0000	1,512.2249
Unmitigated	610.3938	36.0732	0.0000	1,512.2249

**8.2 Waste by Land Use**

**Unmitigated**

Existing 2021 - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	3007	610.3938	36.0732	0.0000	1,512.2249
<b>Total</b>		<b>610.3938</b>	<b>36.0732</b>	<b>0.0000</b>	<b>1,512.2249</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	3007	610.3938	36.0732	0.0000	1,512.2249
<b>Total</b>		<b>610.3938</b>	<b>36.0732</b>	<b>0.0000</b>	<b>1,512.2249</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

# CalEEMod Output: Existing 2050 Operation

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Existing 2021 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**Existing 2050**  
 San Bernardino-South Coast County, Summer

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	588.48	1000sqft	13.51	588,479.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity factor based on SCE 20202 Sustainability Report

Land Use - Based on the project description.

Construction Phase -

Vehicle Trips - Based on information provided by the traffic consultant and the default weekend trip rates.

Energy Use -

Water And Wastewater - See modeling assumptions file in the AQ/GHG appendix for details. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Fleet Mix - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	200.00
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06

Existing 2021 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	6.1430e-003	6.3450e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	765.02	3,007.00
tblVehicleTrips	ST_TR	11.23	17.89
tblVehicleTrips	SU_TR	1.21	1.93
tblVehicleTrips	WD_TR	20.25	32.26
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	28,864,374.65	35,270,834.00
tblWater	OutdoorWaterUseRate	45,146,842.39	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational  
Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	33.9104	18.4903	357.8647	0.7883	119.8766	0.2589	120.1356	31.8146	0.2401	32.0547		88,982.5549	88,982.5549	3.5857	2.5734	89,839.0837
<b>Total</b>	<b>47.3541</b>	<b>21.1432</b>	<b>360.1524</b>	<b>0.8042</b>	<b>119.8766</b>	<b>0.4607</b>	<b>120.3374</b>	<b>31.8146</b>	<b>0.4419</b>	<b>32.2565</b>		<b>92,165.496</b>	<b>92,165.496</b>	<b>3.6471</b>	<b>2.6318</b>	<b>93,040.947</b>

Existing 2021 - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	33.9104	18.4903	357.8647	0.7883	119.8766	0.2589	120.1356	31.8146	0.2401	32.0547		88,982.5549	88,982.5549	3.5857	2.5734	89,839.0837
<b>Total</b>	<b>47.3541</b>	<b>21.1432</b>	<b>360.1524</b>	<b>0.8042</b>	<b>119.8766</b>	<b>0.4607</b>	<b>120.3374</b>	<b>31.8146</b>	<b>0.4419</b>	<b>32.2565</b>		<b>92,165.4967</b>	<b>92,165.4967</b>	<b>3.6471</b>	<b>2.6318</b>	<b>93,040.9478</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	33.9104	18.4903	357.8647	0.7883	119.8766	0.2589	120.1356	31.8146	0.2401	32.0547		88,982.5549	88,982.5549	3.5857	2.5734	89,839.0837
Unmitigated	33.9104	18.4903	357.8647	0.7883	119.8766	0.2589	120.1356	31.8146	0.2401	32.0547		88,982.5549	88,982.5549	3.5857	2.5734	89,839.0837

Existing 2021 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,981.98	10,526.83	1134.23	45,983,210	45,983,210
Total	18,981.98	10,526.83	1,134.23	45,983,210	45,983,210

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576395	0.062645	0.184759	0.124743	0.021623	0.006345	0.000211	0.000316	0.000000	0.000000	0.022963	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
NaturalGas Unmitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270

Existing 2021 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	27053.9	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
<b>Total</b>		<b>0.2918</b>	<b>2.6523</b>	<b>2.2280</b>	<b>0.0159</b>		<b>0.2016</b>	<b>0.2016</b>		<b>0.2016</b>	<b>0.2016</b>		<b>3,182.8131</b>	<b>3,182.8131</b>	<b>0.0610</b>	<b>0.0584</b>	<b>3,201.7270</b>

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	27.0539	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
<b>Total</b>		<b>0.2918</b>	<b>2.6523</b>	<b>2.2280</b>	<b>0.0159</b>		<b>0.2016</b>	<b>0.2016</b>		<b>0.2016</b>	<b>0.2016</b>		<b>3,182.8131</b>	<b>3,182.8131</b>	<b>0.0610</b>	<b>0.0584</b>	<b>3,201.7270</b>

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
Unmitigated	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371

Existing 2021 - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.4600e-003	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
<b>Total</b>	<b>13.1519</b>	<b>5.4000e-004</b>	<b>0.0597</b>	<b>0.0000</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.3000e-004</b>		<b>0.1371</b>

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.4600e-003	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
<b>Total</b>	<b>13.1519</b>	<b>5.4000e-004</b>	<b>0.0597</b>	<b>0.0000</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.3000e-004</b>		<b>0.1371</b>

Existing 2021 - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Existing 2050 - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**Existing 2050**  
 San Bernardino-South Coast County, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	588.48	1000sqft	200.00	588,479.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity factor based on SCE 20202 Sustainability Report

Land Use - Based on the project description.

Construction Phase -

Vehicle Trips - Based on information provided by the traffic consultant and the default weekend trip rates.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Water And Wastewater - See modeling assumptions file in the AQ/GHG appendix for details. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Fleet Mix - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	20.00
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06



Existing 2050 - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	6.1430e-003	6.3450e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblLandUse	LotAcreage	13.51	200.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	765.02	3,007.00
tblVehicleTrips	ST_TR	11.23	17.89
tblVehicleTrips	SU_TR	1.21	1.93
tblVehicleTrips	WD_TR	20.25	32.26
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	28,864,374.65	35,270,834.00
tblWater	OutdoorWaterUseRate	45,146,842.39	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	29.5007	20.0268	323.2506	0.7231	119.8766	0.2589	120.1356	31.8146	0.2401	32.0548		81,552.9124	81,552.9124	3.6688	2.6700	82,440.2878
<b>Total</b>	<b>42.9443</b>	<b>22.6797</b>	<b>325.5383</b>	<b>0.7390</b>	<b>119.8766</b>	<b>0.4607</b>	<b>120.3374</b>	<b>31.8146</b>	<b>0.4419</b>	<b>32.2565</b>		<b>84,735.854</b>	<b>84,735.854</b>	<b>3.7302</b>	<b>2.7283</b>	<b>85,642.151</b>

Existing 2050 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
Energy	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
Mobile	29.5007	20.0268	323.2506	0.7231	119.8766	0.2589	120.1356	31.8146	0.2401	32.0548		81,552.9124	81,552.9124	3.6688	2.6700	82,440.2878
<b>Total</b>	<b>42.9443</b>	<b>22.6797</b>	<b>325.5383</b>	<b>0.7390</b>	<b>119.8766</b>	<b>0.4607</b>	<b>120.3374</b>	<b>31.8146</b>	<b>0.4419</b>	<b>32.2565</b>		<b>84,735.8543</b>	<b>84,735.8543</b>	<b>3.7302</b>	<b>2.7283</b>	<b>85,642.1519</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	29.5007	20.0268	323.2506	0.7231	119.8766	0.2589	120.1356	31.8146	0.2401	32.0548		81,552.9124	81,552.9124	3.6688	2.6700	82,440.2878
Unmitigated	29.5007	20.0268	323.2506	0.7231	119.8766	0.2589	120.1356	31.8146	0.2401	32.0548		81,552.9124	81,552.9124	3.6688	2.6700	82,440.2878

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,981.98	10,526.83	1,134.23	45,983,210	45,983,210
<b>Total</b>	<b>18,981.98</b>	<b>10,526.83</b>	<b>1,134.23</b>	<b>45,983,210</b>	<b>45,983,210</b>

Existing 2050 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576395	0.062645	0.184759	0.124743	0.021623	0.006345	0.000211	0.000316	0.000000	0.000000	0.022963	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
NaturalGas Mitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
NaturalGas Unmitigated	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
kBTU/yr	lb/day											lb/day					
Junior College (2yr)	27053.9	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016		3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
<b>Total</b>		<b>0.2918</b>	<b>2.6523</b>	<b>2.2280</b>	<b>0.0159</b>		<b>0.2016</b>	<b>0.2016</b>		<b>0.2016</b>	<b>0.2016</b>		<b>3,182.8131</b>	<b>3,182.8131</b>	<b>0.0610</b>	<b>0.0584</b>	<b>3,201.7270</b>

Existing 2050 - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Junior College (2yr)	27.0539	0.2918	2.6523	2.2280	0.0159		0.2016	0.2016		0.2016	0.2016			3,182.8131	3,182.8131	0.0610	0.0584	3,201.7270
<b>Total</b>		<b>0.2918</b>	<b>2.6523</b>	<b>2.2280</b>	<b>0.0159</b>		<b>0.2016</b>	<b>0.2016</b>		<b>0.2016</b>	<b>0.2016</b>			<b>3,182.8131</b>	<b>3,182.8131</b>	<b>0.0610</b>	<b>0.0584</b>	<b>3,201.7270</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
Unmitigated	13.1519	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.4600e-003	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
<b>Total</b>	<b>13.1519</b>	<b>5.4000e-004</b>	<b>0.0597</b>	<b>0.0000</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.3000e-004</b>		<b>0.1371</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.6519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.4600e-003	5.4000e-004	0.0597	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1288	0.1288	3.3000e-004		0.1371
<b>Total</b>	<b>13.1519</b>	<b>5.4000e-004</b>	<b>0.0597</b>	<b>0.0000</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>0.1288</b>	<b>0.1288</b>	<b>3.3000e-004</b>		<b>0.1371</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

Existing 2021 - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**Existing 2050**  
 San Bernardino-South Coast County, Annual

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	588.48	1000sqft	13.51	588,479.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity factor based on SCE 20202 Sustainability Report

Land Use - Based on the project description.

Construction Phase -

Vehicle Trips - Based on information provided by the traffic consultant and the default weekend trip rates.

Energy Use -

Water And Wastewater - See modeling assumptions file in the AQ/GHG appendix for details. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Fleet Mix - See modeling assumptions file in the AQ/GHG appendix of the DEIR for details.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	200.00
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06

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tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	6.1430e-003	6.3450e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	765.02	3,007.00
tblVehicleTrips	ST_TR	11.23	17.89
tblVehicleTrips	SU_TR	1.21	1.93
tblVehicleTrips	WD_TR	20.25	32.26
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	28,864,374.65	35,270,834.00
tblWater	OutdoorWaterUseRate	45,146,842.39	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.2 Overall Operational  
Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.3999	7.0000e-005	7.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
Energy	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	1,809.2832	1,809.2832	0.0931	0.0197	1,817.4863
Mobile	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.6202	10,975.6202	0.4905	0.3607	11,095.3614
Waste						0.0000	0.0000		0.0000	0.0000	610.3938	0.0000	610.3938	36.0732	0.0000	1,512.2249
Water						0.0000	0.0000		0.0000	0.0000	12.4789	248.0283	260.5072	0.0590	0.0291	270.6489
<b>Total</b>	<b>6.7230</b>	<b>3.5051</b>	<b>49.5169</b>	<b>0.1102</b>	<b>17.1656</b>	<b>0.0746</b>	<b>17.2401</b>	<b>4.5623</b>	<b>0.0718</b>	<b>4.6341</b>	<b>622.8727</b>	<b>13,032.9463</b>	<b>13,655.8190</b>	<b>36.7159</b>	<b>0.4095</b>	<b>14,695.7370</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.3999	7.0000e-005	7.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
Energy	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	1,809.2832	1,809.2832	0.0931	0.0197	1,817.4863
Mobile	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.6202	10,975.6202	0.4905	0.3607	11,095.3614
Waste						0.0000	0.0000		0.0000	0.0000	610.3938	0.0000	610.3938	36.0732	0.0000	1,512.2249
Water						0.0000	0.0000		0.0000	0.0000	12.4789	248.0283	260.5072	0.0590	0.0291	270.6489
<b>Total</b>	<b>6.7230</b>	<b>3.5051</b>	<b>49.5169</b>	<b>0.1102</b>	<b>17.1656</b>	<b>0.0746</b>	<b>17.2401</b>	<b>4.5623</b>	<b>0.0718</b>	<b>4.6341</b>	<b>622.8727</b>	<b>13,032.9463</b>	<b>13,655.8190</b>	<b>36.7159</b>	<b>0.4095</b>	<b>14,695.7370</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.620 2	10,975.620 2	0.4905	0.3607	11,095.361 4
Unmitigated	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.620 2	10,975.620 2	0.4905	0.3607	11,095.361 4

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,981.98	10,526.83	1134.23	45,983,210	45,983,210
Total	18,981.98	10,526.83	1,134.23	45,983,210	45,983,210

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576395	0.062645	0.184759	0.124743	0.021623	0.006345	0.000211	0.000316	0.000000	0.000000	0.022963	0.000000	0.000000

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5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,282.3328	1,282.3328	0.0830	0.0101	1,287.4045
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,282.3328	1,282.3328	0.0830	0.0101	1,287.4045
NaturalGas Mitigated	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818
NaturalGas Unmitigated	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	9.87468e+006	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818
<b>Total</b>		<b>0.0533</b>	<b>0.4841</b>	<b>0.4066</b>	<b>2.9000e-003</b>		<b>0.0368</b>	<b>0.0368</b>		<b>0.0368</b>	<b>0.0368</b>	<b>0.0000</b>	<b>526.9504</b>	<b>526.9504</b>	<b>0.0101</b>	<b>9.6600e-003</b>	<b>530.0818</b>

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**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	9.87468e+006	0.0533	0.4841	0.4066	2.9000e-003		0.0368	0.0368		0.0368	0.0368	0.0000	526.9504	526.9504	0.0101	9.6600e-003	530.0818
<b>Total</b>		<b>0.0533</b>	<b>0.4841</b>	<b>0.4066</b>	<b>2.9000e-003</b>		<b>0.0368</b>	<b>0.0368</b>		<b>0.0368</b>	<b>0.0368</b>	<b>0.0000</b>	<b>526.9504</b>	<b>526.9504</b>	<b>0.0101</b>	<b>9.6600e-003</b>	<b>530.0818</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	5.54347e+006	1,282.3328	0.0830	0.0101	1,287.4045
<b>Total</b>		<b>1,282.3328</b>	<b>0.0830</b>	<b>0.0101</b>	<b>1,287.4045</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	5.54347e+006	1,282.3328	0.0830	0.0101	1,287.4045
<b>Total</b>		<b>1,282.3328</b>	<b>0.0830</b>	<b>0.0101</b>	<b>1,287.4045</b>

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**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.3999	7.0000e-005	7.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
Unmitigated	2.3999	7.0000e-005	7.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2728					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.8000e-004	7.0000e-005	7.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156
<b>Total</b>	<b>2.3999</b>	<b>7.0000e-005</b>	<b>7.4600e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0146</b>	<b>0.0146</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0156</b>

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**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.2728					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.8000e-004	7.0000e-005	7.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0156	0.0156
<b>Total</b>	<b>2.3999</b>	<b>7.0000e-005</b>	<b>7.4600e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0146</b>	<b>0.0146</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0156</b>	<b>0.0156</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	260.5072	0.0590	0.0291	270.6489
Unmitigated	260.5072	0.0590	0.0291	270.6489

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	35.2708 / 55.1714	260.5072	0.0590	0.0291	270.6489
<b>Total</b>		<b>260.5072</b>	<b>0.0590</b>	<b>0.0291</b>	<b>270.6489</b>

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**Mitigated**

Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	35.2708 / 55.1714	260.5072	0.0590	0.0291	270.6489
<b>Total</b>		<b>260.5072</b>	<b>0.0590</b>	<b>0.0291</b>	<b>270.6489</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	610.3938	36.0732	0.0000	1,512.2249
Unmitigated	610.3938	36.0732	0.0000	1,512.2249

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	3007	610.3938	36.0732	0.0000	1,512.2249
<b>Total</b>		<b>610.3938</b>	<b>36.0732</b>	<b>0.0000</b>	<b>1,512.2249</b>

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**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	3007	610.3938	36.0732	0.0000	1,512.2249
<b>Total</b>		<b>610.3938</b>	<b>36.0732</b>	<b>0.0000</b>	<b>1,512.2249</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# CalEEMod Output: Existing Remaining 2050 Operation



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ExRemain - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**ExRemain**

**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	361.82	1000sqft	182.33	361,815.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Based on SCE's 2020 Sustainability Report.

Land Use - See modeling assumptions file in the AQ/GHG appendix of the DEIR.

Construction Phase - For operation emissions only.

Vehicle Trips - See modeling assumptions file in the AQ/GHG appendix of the DEIR.

Fleet Mix - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Energy Use -

Water And Wastewater - See modeling assumptions in the AQ/GHG appendix of the DEIR. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	1.00
tblConstructionPhase	PhaseEndDate	10/14/2022	1/10/2022
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02

ExRemain - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LHD2	6.1430e-003	6.3450e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblLandUse	LotAcreage	8.31	182.33
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	470.35	3,007.00
tblVehicleTrips	ST_TR	11.23	29.09
tblVehicleTrips	SU_TR	1.21	3.13
tblVehicleTrips	WD_TR	20.25	52.46
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	17,746,430.45	35,270,834.00
tblWater	OutdoorWaterUseRate	27,757,237.37	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational  
Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
Energy	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
Mobile	33.9105	18.4904	357.8653	0.7883	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		88,982.6967	88,982.6967	3.5857	2.5735	89,839.2270
<b>Total</b>	<b>42.1761</b>	<b>20.1214</b>	<b>359.2718</b>	<b>0.7981</b>	<b>119.8768</b>	<b>0.3830</b>	<b>120.2598</b>	<b>31.8147</b>	<b>0.3642</b>	<b>32.1789</b>		<b>90,939.6674</b>	<b>90,939.6674</b>	<b>3.6234</b>	<b>2.6093</b>	<b>91,807.8315</b>

ExRemain - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
Energy	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
Mobile	33.9105	18.4904	357.8653	0.7883	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		88,982.6967	88,982.6967	3.5857	2.5735	89,839.2270
<b>Total</b>	<b>42.1761</b>	<b>20.1214</b>	<b>359.2718</b>	<b>0.7981</b>	<b>119.8768</b>	<b>0.3830</b>	<b>120.2598</b>	<b>31.8147</b>	<b>0.3642</b>	<b>32.1789</b>		<b>90,939.6674</b>	<b>90,939.6674</b>	<b>3.6234</b>	<b>2.6093</b>	<b>91,807.8315</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	33.9105	18.4904	357.8653	0.7883	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		88,982.6967	88,982.6967	3.5857	2.5735	89,839.2270
Unmitigated	33.9105	18.4904	357.8653	0.7883	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		88,982.6967	88,982.6967	3.5857	2.5735	89,839.2270

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,982.01	10,526.79	1,134.22	45,983,251	45,983,251
<b>Total</b>	<b>18,982.01</b>	<b>10,526.79</b>	<b>1,134.22</b>	<b>45,983,251</b>	<b>45,983,251</b>

ExRemain - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576395	0.062645	0.184759	0.124743	0.021623	0.006345	0.000211	0.000316	0.000000	0.000000	0.022963	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
NaturalGas Unmitigated	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	16633.6	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
<b>Total</b>		<b>0.1794</b>	<b>1.6307</b>	<b>1.3698</b>	<b>9.7800e-003</b>		<b>0.1239</b>	<b>0.1239</b>		<b>0.1239</b>	<b>0.1239</b>		<b>1,956.8914</b>	<b>1,956.8914</b>	<b>0.0375</b>	<b>0.0359</b>	<b>1,968.5203</b>

ExRemain - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	16.6336	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
<b>Total</b>		<b>0.1794</b>	<b>1.6307</b>	<b>1.3698</b>	<b>9.7800e-003</b>		<b>0.1239</b>	<b>0.1239</b>		<b>0.1239</b>	<b>0.1239</b>		<b>1,956.8914</b>	<b>1,956.8914</b>	<b>0.0375</b>	<b>0.0359</b>	<b>1,968.5203</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
Unmitigated	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9189					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
<b>Total</b>	<b>8.0862</b>	<b>3.3000e-004</b>	<b>0.0367</b>	<b>0.0000</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>0.0792</b>	<b>0.0792</b>	<b>2.0000e-004</b>		<b>0.0843</b>

ExRemain - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.9189					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	7.1639					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004			0.0843
<b>Total</b>	<b>8.0862</b>	<b>3.3000e-004</b>	<b>0.0367</b>	<b>0.0000</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>0.0792</b>	<b>0.0792</b>	<b>2.0000e-004</b>			<b>0.0843</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

ExRemain - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

ExRemain

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	361.82	1000sqft	182.33	361,815.00	0

1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on SCE's 2020 Sustainability Report.

Land Use - See modeling assumptions file in the AQ/GHG appendix of the DEIR.

Construction Phase - For operation emissions only.

Vehicle Trips - See modeling assumptions file in the AQ/GHG appendix of the DEIR.

Fleet Mix - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Energy Use -

Water And Wastewater - See modeling assumptions in the AQ/GHG appendix of the DEIR. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	1.00
tblConstructionPhase	PhaseEndDate	10/14/2022	1/10/2022
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02



ExRemain - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LHD2	6.1430e-003	6.3450e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblLandUse	LotAcreage	8.31	182.33
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	470.35	3,007.00
tblVehicleTrips	ST_TR	11.23	29.09
tblVehicleTrips	SU_TR	1.21	3.13
tblVehicleTrips	WD_TR	20.25	52.46
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	17,746,430.45	35,270,834.00
tblWater	OutdoorWaterUseRate	27,757,237.37	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational  
Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
Energy	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
Mobile	29.5007	20.0268	323.2511	0.7231	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		81,553.0424	81,553.0424	3.6688	2.6700	82,440.4193
<b>Total</b>	<b>37.7663</b>	<b>21.6579</b>	<b>324.6576</b>	<b>0.7329</b>	<b>119.8768</b>	<b>0.3830</b>	<b>120.2598</b>	<b>31.8147</b>	<b>0.3642</b>	<b>32.1789</b>		<b>83,510.0131</b>	<b>83,510.0131</b>	<b>3.7065</b>	<b>2.7059</b>	<b>84,409.0238</b>

ExRemain - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
Energy	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
Mobile	29.5007	20.0268	323.2511	0.7231	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		81,553.0424	81,553.0424	3.6688	2.6700	82,440.4193
<b>Total</b>	<b>37.7663</b>	<b>21.6579</b>	<b>324.6576</b>	<b>0.7329</b>	<b>119.8768</b>	<b>0.3830</b>	<b>120.2598</b>	<b>31.8147</b>	<b>0.3642</b>	<b>32.1789</b>		<b>83,510.0131</b>	<b>83,510.0131</b>	<b>3.7065</b>	<b>2.7059</b>	<b>84,409.0238</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	29.5007	20.0268	323.2511	0.7231	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		81,553.0424	81,553.0424	3.6688	2.6700	82,440.4193
Unmitigated	29.5007	20.0268	323.2511	0.7231	119.8768	0.2589	120.1358	31.8147	0.2401	32.0548		81,553.0424	81,553.0424	3.6688	2.6700	82,440.4193

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,982.01	10,526.79	1,134.22	45,983,251	45,983,251
<b>Total</b>	<b>18,982.01</b>	<b>10,526.79</b>	<b>1,134.22</b>	<b>45,983,251</b>	<b>45,983,251</b>

ExRemain - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576395	0.062645	0.184759	0.124743	0.021623	0.006345	0.000211	0.000316	0.000000	0.000000	0.022963	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
NaturalGas Unmitigated	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	16633.6	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
<b>Total</b>		<b>0.1794</b>	<b>1.6307</b>	<b>1.3698</b>	<b>9.7800e-003</b>		<b>0.1239</b>	<b>0.1239</b>		<b>0.1239</b>	<b>0.1239</b>		<b>1,956.8914</b>	<b>1,956.8914</b>	<b>0.0375</b>	<b>0.0359</b>	<b>1,968.5203</b>

ExRemain - San Bernardino-South Coast County, Winter

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**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	16.6336	0.1794	1.6307	1.3698	9.7800e-003		0.1239	0.1239		0.1239	0.1239		1,956.8914	1,956.8914	0.0375	0.0359	1,968.5203
<b>Total</b>		<b>0.1794</b>	<b>1.6307</b>	<b>1.3698</b>	<b>9.7800e-003</b>		<b>0.1239</b>	<b>0.1239</b>		<b>0.1239</b>	<b>0.1239</b>		<b>1,956.8914</b>	<b>1,956.8914</b>	<b>0.0375</b>	<b>0.0359</b>	<b>1,968.5203</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
Unmitigated	8.0862	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9189					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
<b>Total</b>	<b>8.0862</b>	<b>3.3000e-004</b>	<b>0.0367</b>	<b>0.0000</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>0.0792</b>	<b>0.0792</b>	<b>2.0000e-004</b>		<b>0.0843</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9189					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0367	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0792	0.0792	2.0000e-004		0.0843
<b>Total</b>	<b>8.0862</b>	<b>3.3000e-004</b>	<b>0.0367</b>	<b>0.0000</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>0.0792</b>	<b>0.0792</b>	<b>2.0000e-004</b>		<b>0.0843</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

ExRemain - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

ExRemain

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	361.82	1000sqft	182.33	361,815.00	0

1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on SCE's 2020 Sustainability Report.

Land Use - See modeling assumptions file in the AQ/GHG appendix of the DEIR.

Construction Phase - For operation emissions only.

Vehicle Trips - See modeling assumptions file in the AQ/GHG appendix of the DEIR.

Fleet Mix - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Energy Use -

Water And Wastewater - See modeling assumptions in the AQ/GHG appendix of the DEIR. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	1.00
tblConstructionPhase	PhaseEndDate	10/14/2022	1/10/2022
tblFleetMix	HHD	0.02	3.1600e-004
tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02

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tblFleetMix	LHD2	6.1430e-003	6.3450e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	2.1100e-004
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblLandUse	LotAcreage	8.31	182.33
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	470.35	3,007.00
tblVehicleTrips	ST_TR	11.23	29.09
tblVehicleTrips	SU_TR	1.21	3.13
tblVehicleTrips	WD_TR	20.25	52.46
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	17,746,430.45	35,270,834.00
tblWater	OutdoorWaterUseRate	27,757,237.37	55,171,426.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.2 Overall Operational  
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4755	4.0000e-005	4.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.9800e-003	8.9800e-003	2.0000e-005	0.0000	9.5600e-003
Energy	0.0327	0.2976	0.2500	1.7900e-003		0.0226	0.0226		0.0226	0.0226	0.0000	1,112.4030	1,112.4030	0.0572	0.0121	1,117.4465
Mobile	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.6299	10,975.6299	0.4905	0.3607	11,095.3712
Waste						0.0000	0.0000		0.0000	0.0000	610.3938	0.0000	610.3938	36.0732	0.0000	1,512.2249
Water						0.0000	0.0000		0.0000	0.0000	12.4789	248.0283	260.5072	0.0590	0.0291	270.6489
<b>Total</b>	<b>5.7782</b>	<b>3.3186</b>	<b>49.3575</b>	<b>0.1091</b>	<b>17.1656</b>	<b>0.0604</b>	<b>17.2260</b>	<b>4.5623</b>	<b>0.0577</b>	<b>4.6199</b>	<b>622.8727</b>	<b>12,336.070</b>	<b>12,958.942</b>	<b>36.6800</b>	<b>0.4019</b>	<b>13,995.701</b>

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4755	4.0000e-005	4.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.9800e-003	8.9800e-003	2.0000e-005	0.0000	9.5600e-003
Energy	0.0327	0.2976	0.2500	1.7900e-003		0.0226	0.0226		0.0226	0.0226	0.0000	1,112.4030	1,112.4030	0.0572	0.0121	1,117.4465
Mobile	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.6299	10,975.6299	0.4905	0.3607	11,095.3712
Waste						0.0000	0.0000		0.0000	0.0000	610.3938	0.0000	610.3938	36.0732	0.0000	1,512.2249
Water						0.0000	0.0000		0.0000	0.0000	12.4789	248.0283	260.5072	0.0590	0.0291	270.6489
<b>Total</b>	<b>5.7782</b>	<b>3.3186</b>	<b>49.3575</b>	<b>0.1091</b>	<b>17.1656</b>	<b>0.0604</b>	<b>17.2260</b>	<b>4.5623</b>	<b>0.0577</b>	<b>4.6199</b>	<b>622.8727</b>	<b>12,336.0702</b>	<b>12,958.9429</b>	<b>36.6800</b>	<b>0.4019</b>	<b>13,995.7011</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.6299	10,975.6299	0.4905	0.3607	11,095.3712
Unmitigated	4.2699	3.0210	49.1029	0.1073	17.1656	0.0378	17.2033	4.5623	0.0350	4.5973	0.0000	10,975.6299	10,975.6299	0.4905	0.3607	11,095.3712



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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	18,982.01	10,526.79	1134.22	45,983,251	45,983,251
<b>Total</b>	<b>18,982.01</b>	<b>10,526.79</b>	<b>1,134.22</b>	<b>45,983,251</b>	<b>45,983,251</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576395	0.062645	0.184759	0.124743	0.021623	0.006345	0.000211	0.000316	0.000000	0.000000	0.022963	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	788.4177	788.4177	0.0510	6.1800e-003	791.5359
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	788.4177	788.4177	0.0510	6.1800e-003	791.5359
NaturalGas Mitigated	0.0327	0.2976	0.2500	1.7900e-003		0.0226	0.0226		0.0226	0.0226	0.0000	323.9853	323.9853	6.2100e-003	5.9400e-003	325.9106
NaturalGas Unmitigated	0.0327	0.2976	0.2500	1.7900e-003		0.0226	0.0226		0.0226	0.0226	0.0000	323.9853	323.9853	6.2100e-003	5.9400e-003	325.9106

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	6.07126e+006	0.0327	0.2976	0.2500	1.7900e-003		0.0226	0.0226		0.0226	0.0226	0.0000	323.9853	323.9853	6.2100e-003	5.9400e-003	325.9106
<b>Total</b>		<b>0.0327</b>	<b>0.2976</b>	<b>0.2500</b>	<b>1.7900e-003</b>		<b>0.0226</b>	<b>0.0226</b>		<b>0.0226</b>	<b>0.0226</b>	<b>0.0000</b>	<b>323.9853</b>	<b>323.9853</b>	<b>6.2100e-003</b>	<b>5.9400e-003</b>	<b>325.9106</b>

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	6.07126e+006	0.0327	0.2976	0.2500	1.7900e-003		0.0226	0.0226		0.0226	0.0226	0.0000	323.9853	323.9853	6.2100e-003	5.9400e-003	325.9106
<b>Total</b>		<b>0.0327</b>	<b>0.2976</b>	<b>0.2500</b>	<b>1.7900e-003</b>		<b>0.0226</b>	<b>0.0226</b>		<b>0.0226</b>	<b>0.0226</b>	<b>0.0000</b>	<b>323.9853</b>	<b>323.9853</b>	<b>6.2100e-003</b>	<b>5.9400e-003</b>	<b>325.9106</b>

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	3.4083e+006	788.4177	0.0510	6.1800e-003	791.5359
<b>Total</b>		<b>788.4177</b>	<b>0.0510</b>	<b>6.1800e-003</b>	<b>791.5359</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	3.4083e+06	788.4177	0.0510	6.1800e-003	791.5359
<b>Total</b>		<b>788.4177</b>	<b>0.0510</b>	<b>6.1800e-003</b>	<b>791.5359</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4755	4.0000e-005	4.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.9800e-003	8.9800e-003	2.0000e-005	0.0000	9.5600e-003
Unmitigated	1.4755	4.0000e-005	4.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.9800e-003	8.9800e-003	2.0000e-005	0.0000	9.5600e-003

ExRemain - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3074					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.2000e-004	4.0000e-005	4.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.9800e-003	8.9800e-003	2.0000e-005	0.0000	9.5600e-003
<b>Total</b>	<b>1.4755</b>	<b>4.0000e-005</b>	<b>4.5900e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.9800e-003</b>	<b>8.9800e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5600e-003</b>

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3074					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.2000e-004	4.0000e-005	4.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.9800e-003	8.9800e-003	2.0000e-005	0.0000	9.5600e-003
<b>Total</b>	<b>1.4755</b>	<b>4.0000e-005</b>	<b>4.5900e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.9800e-003</b>	<b>8.9800e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5600e-003</b>

ExRemain - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	260.5072	0.0590	0.0291	270.6489
Unmitigated	260.5072	0.0590	0.0291	270.6489

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	35.2708 / 55.1714	260.5072	0.0590	0.0291	270.6489
<b>Total</b>		<b>260.5072</b>	<b>0.0590</b>	<b>0.0291</b>	<b>270.6489</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	35.2708 / 55.1714	260.5072	0.0590	0.0291	270.6489
<b>Total</b>		<b>260.5072</b>	<b>0.0590</b>	<b>0.0291</b>	<b>270.6489</b>

ExRemain - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	610.3938	36.0732	0.0000	1,512.2249
Unmitigated	610.3938	36.0732	0.0000	1,512.2249

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	3007	610.3938	36.0732	0.0000	1,512.2249
<b>Total</b>		<b>610.3938</b>	<b>36.0732</b>	<b>0.0000</b>	<b>1,512.2249</b>

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	3007	610.3938	36.0732	0.0000	1,512.2249
<b>Total</b>		<b>610.3938</b>	<b>36.0732</b>	<b>0.0000</b>	<b>1,512.2249</b>

ExRemain - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# CalEEMod Output: Proposed New Operation



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New Proposed - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**New Proposed**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	396.45	1000sqft	4.99	396,447.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Based on SCE's 2020 Sustainability Report. See modeling assumptions in the AQ/GHG appendix of the DEIR.

Land Use - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Construction Phase - No construction. Operation emissions model run.

Vehicle Trips - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Fleet Mix - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Area Coating - Based on surface parking lot.

Water And Wastewater - See modeling assumptions in the AQ/GHG appendix of the DEIR. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	33124	19284
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	2/4/2022	1/10/2022
tblFleetMix	HHD	0.02	0.00

New Proposed - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	6.1430e-003	6.3480e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblLandUse	LotAcreage	9.10	4.99
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	515.38	170.00
tblVehicleTrips	ST_TR	11.23	1.50
tblVehicleTrips	SU_TR	1.21	0.16
tblVehicleTrips	WD_TR	20.25	2.70
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	19,445,488.93	1,991,130.00
tblWater	OutdoorWaterUseRate	30,414,739.10	3,114,570.00
tblWater	SepticTankPercent	10.33	0.00

New Proposed - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
Energy	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Mobile	1.9119	1.0200	20.1743	0.0444	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		5,008.5805	5,008.5805	0.2020	0.1437	5,056.4393
<b>Total</b>	<b>11.1576</b>	<b>2.4786</b>	<b>21.4950</b>	<b>0.0531</b>	<b>6.7567</b>	<b>0.1256</b>	<b>6.8823</b>	<b>1.7931</b>	<b>0.1245</b>	<b>1.9176</b>		<b>6,758.1384</b>	<b>6,758.1384</b>	<b>0.2361</b>	<b>0.1757</b>	<b>6,816.4062</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
Energy	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Mobile	1.9119	1.0200	20.1743	0.0444	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		5,008.5805	5,008.5805	0.2020	0.1437	5,056.4393
<b>Total</b>	<b>11.1576</b>	<b>2.4786</b>	<b>21.4950</b>	<b>0.0531</b>	<b>6.7567</b>	<b>0.1256</b>	<b>6.8823</b>	<b>1.7931</b>	<b>0.1245</b>	<b>1.9176</b>		<b>6,758.1384</b>	<b>6,758.1384</b>	<b>0.2361</b>	<b>0.1757</b>	<b>6,816.4062</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

New Proposed - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	1.9119	1.0200	20.1743	0.0444	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		5,008.5805	5,008.5805	0.2020	0.1437	5,056.4393
Unmitigated	1.9119	1.0200	20.1743	0.0444	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		5,008.5805	5,008.5805	0.2020	0.1437	5,056.4393

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	1,070.01	593.40	63.95	2,592,072	2,592,072
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>1,070.01</b>	<b>593.40</b>	<b>63.95</b>	<b>2,592,072</b>	<b>2,592,072</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576699	0.062678	0.184856	0.124808	0.021634	0.006348	0.000000	0.000000	0.000000	0.000000	0.022975	0.000000	0.000000
Other Asphalt Surfaces	0.558039	0.060650	0.178875	0.120770	0.020934	0.006143	0.012443	0.015691	0.000493	0.000199	0.022232	0.000895	0.002635
Parking Lot	0.558039	0.060650	0.178875	0.120770	0.020934	0.006143	0.012443	0.015691	0.000493	0.000199	0.022232	0.000895	0.002635

New Proposed - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
NaturalGas Unmitigated	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	14869.5	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.1604</b>	<b>1.4578</b>	<b>1.2246</b>	<b>8.7500e-003</b>		<b>0.1108</b>	<b>0.1108</b>		<b>0.1108</b>	<b>0.1108</b>		<b>1,749.3503</b>	<b>1,749.3503</b>	<b>0.0335</b>	<b>0.0321</b>	<b>1,759.7459</b>

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	14.8695	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.1604</b>	<b>1.4578</b>	<b>1.2246</b>	<b>8.7500e-003</b>		<b>0.1108</b>	<b>0.1108</b>		<b>0.1108</b>	<b>0.1108</b>		<b>1,749.3503</b>	<b>1,749.3503</b>	<b>0.0335</b>	<b>0.0321</b>	<b>1,759.7459</b>

New Proposed - San Bernardino-South Coast County, Summer  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
Unmitigated	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.0452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.8100e-003	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
<b>Total</b>	<b>9.0854</b>	<b>8.6000e-004</b>	<b>0.0962</b>	<b>1.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>0.2076</b>	<b>0.2076</b>	<b>5.3000e-004</b>		<b>0.2210</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.0452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.8100e-003	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
<b>Total</b>	<b>9.0854</b>	<b>8.6000e-004</b>	<b>0.0962</b>	<b>1.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>0.2076</b>	<b>0.2076</b>	<b>5.3000e-004</b>		<b>0.2210</b>

New Proposed - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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New Proposed - San Bernardino-South Coast County, Winter  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**New Proposed**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	396.45	1000sqft	4.99	396,447.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Based on SCE's 2020 Sustainability Report. See modeling assumptions in the AQ/GHG appendix of the DEIR.

Land Use - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Construction Phase - No construction. Operation emissions model run.

Vehicle Trips - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Fleet Mix - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Area Coating - Based on surface parking lot.

Water And Wastewater - See modeling assumptions in the AQ/GHG appendix of the DEIR. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	33124	19284
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	2/4/2022	1/10/2022
tblFleetMix	HHD	0.02	0.00

New Proposed - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	6.1430e-003	6.3480e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblLandUse	LotAcreage	9.10	4.99
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	515.38	170.00
tblVehicleTrips	ST_TR	11.23	1.50
tblVehicleTrips	SU_TR	1.21	0.16
tblVehicleTrips	WD_TR	20.25	2.70
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	19,445,488.93	1,991,130.00
tblWater	OutdoorWaterUseRate	30,414,739.10	3,114,570.00
tblWater	SepticTankPercent	10.33	0.00

New Proposed - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
Energy	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Mobile	1.6632	1.1053	18.2218	0.0407	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		4,589.5257	4,589.5257	0.2067	0.1491	4,639.1230
<b>Total</b>	<b>10.9090</b>	<b>2.5640</b>	<b>19.5425</b>	<b>0.0495</b>	<b>6.7567</b>	<b>0.1256</b>	<b>6.8823</b>	<b>1.7931</b>	<b>0.1245</b>	<b>1.9176</b>		<b>6,339.0837</b>	<b>6,339.0837</b>	<b>0.2408</b>	<b>0.1812</b>	<b>6,399.0898</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
Energy	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Mobile	1.6632	1.1053	18.2218	0.0407	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		4,589.5257	4,589.5257	0.2067	0.1491	4,639.1230
<b>Total</b>	<b>10.9090</b>	<b>2.5640</b>	<b>19.5425</b>	<b>0.0495</b>	<b>6.7567</b>	<b>0.1256</b>	<b>6.8823</b>	<b>1.7931</b>	<b>0.1245</b>	<b>1.9176</b>		<b>6,339.0837</b>	<b>6,339.0837</b>	<b>0.2408</b>	<b>0.1812</b>	<b>6,399.0898</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

New Proposed - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	1.6632	1.1053	18.2218	0.0407	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		4,589.5257	4,589.5257	0.2067	0.1491	4,639.1230
Unmitigated	1.6632	1.1053	18.2218	0.0407	6.7567	0.0144	6.7711	1.7931	0.0134	1.8065		4,589.5257	4,589.5257	0.2067	0.1491	4,639.1230

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	1,070.01	593.40	63.95	2,592,072	2,592,072
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>1,070.01</b>	<b>593.40</b>	<b>63.95</b>	<b>2,592,072</b>	<b>2,592,072</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576699	0.062678	0.184856	0.124808	0.021634	0.006348	0.000000	0.000000	0.000000	0.000000	0.022975	0.000000	0.000000
Other Asphalt Surfaces	0.558039	0.060650	0.178875	0.120770	0.020934	0.006143	0.012443	0.015691	0.000493	0.000199	0.022232	0.000895	0.002635
Parking Lot	0.558039	0.060650	0.178875	0.120770	0.020934	0.006143	0.012443	0.015691	0.000493	0.000199	0.022232	0.000895	0.002635

New Proposed - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
NaturalGas Unmitigated	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	14869.5	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.1604</b>	<b>1.4578</b>	<b>1.2246</b>	<b>8.7500e-003</b>		<b>0.1108</b>	<b>0.1108</b>		<b>0.1108</b>	<b>0.1108</b>		<b>1,749.3503</b>	<b>1,749.3503</b>	<b>0.0335</b>	<b>0.0321</b>	<b>1,759.7459</b>

New Proposed - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2yr)	14.8695	0.1604	1.4578	1.2246	8.7500e-003		0.1108	0.1108		0.1108	0.1108		1,749.3503	1,749.3503	0.0335	0.0321	1,759.7459
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.1604</b>	<b>1.4578</b>	<b>1.2246</b>	<b>8.7500e-003</b>		<b>0.1108</b>	<b>0.1108</b>		<b>0.1108</b>	<b>0.1108</b>		<b>1,749.3503</b>	<b>1,749.3503</b>	<b>0.0335</b>	<b>0.0321</b>	<b>1,759.7459</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
Unmitigated	9.0854	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.0452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.8100e-003	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
<b>Total</b>	<b>9.0854</b>	<b>8.6000e-004</b>	<b>0.0962</b>	<b>1.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>0.2076</b>	<b>0.2076</b>	<b>5.3000e-004</b>		<b>0.2210</b>

New Proposed - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.0452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.8100e-003	8.6000e-004	0.0962	1.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		0.2076	0.2076	5.3000e-004		0.2210
<b>Total</b>	<b>9.0854</b>	<b>8.6000e-004</b>	<b>0.0962</b>	<b>1.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>0.2076</b>	<b>0.2076</b>	<b>5.3000e-004</b>		<b>0.2210</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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New Proposed - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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New Proposed - San Bernardino-South Coast County, Annual  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**New Proposed**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	396.45	1000sqft	4.99	396,447.00	0
Parking Lot	321.40	1000sqft	7.38	321,399.00	0
Other Asphalt Surfaces	230.67	1000sqft	5.30	230,673.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2050
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	509.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Based on SCE's 2020 Sustainability Report. See modeling assumptions in the AQ/GHG appendix of the DEIR.

Land Use - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Construction Phase - No construction. Operation emissions model run.

Vehicle Trips - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Fleet Mix - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Area Coating - Based on surface parking lot.

Water And Wastewater - See modeling assumptions in the AQ/GHG appendix of the DEIR. Assumes 100% aerobic treatment.

Solid Waste - See modeling assumptions in the AQ/GHG appendix of the DEIR.

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	33124	19284
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	2/4/2022	1/10/2022
tblFleetMix	HHD	0.02	0.00

New Proposed - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LDA	0.56	0.58
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	6.1430e-003	6.3480e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.6350e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	4.9300e-004	0.00
tblFleetMix	SBUS	8.9500e-004	0.00
tblFleetMix	UBUS	1.9900e-004	0.00
tblLandUse	LotAcreage	9.10	4.99
tblProjectCharacteristics	CO2IntensityFactor	390.98	509.98
tblSolidWaste	SolidWasteGenerationRate	515.38	170.00
tblVehicleTrips	ST_TR	11.23	1.50
tblVehicleTrips	SU_TR	1.21	0.16
tblVehicleTrips	WD_TR	20.25	2.70
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	19,445,488.93	1,991,130.00
tblWater	OutdoorWaterUseRate	30,414,739.10	3,114,570.00
tblWater	SepticTankPercent	10.33	0.00

New Proposed - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**2.0 Emissions Summary**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6576	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0251
Energy	0.0293	0.2661	0.2235	1.6000e-003		0.0202	0.0202		0.0202	0.0202	0.0000	1,019.0412	1,019.0412	0.0528	0.0110	1,023.6472
Mobile	0.2407	0.1669	2.7680	6.0400e-003	0.9675	2.1000e-003	0.9696	0.2571	1.9500e-003	0.2591	0.0000	617.6983	617.6983	0.0276	0.0201	624.3922
Waste						0.0000	0.0000		0.0000	0.0000	34.5085	0.0000	34.5085	2.0394	0.0000	85.4933
Water						0.0000	0.0000		0.0000	0.0000	0.7045	14.0018	14.7063	3.3300e-003	1.6400e-003	15.2768
<b>Total</b>	<b>1.9276</b>	<b>0.4330</b>	<b>3.0036</b>	<b>7.6400e-003</b>	<b>0.9675</b>	<b>0.0224</b>	<b>0.9899</b>	<b>0.2571</b>	<b>0.0222</b>	<b>0.2794</b>	<b>35.2129</b>	<b>1,650.7648</b>	<b>1,685.9778</b>	<b>2.1232</b>	<b>0.0328</b>	<b>1,748.8365</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6576	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0251
Energy	0.0293	0.2661	0.2235	1.6000e-003		0.0202	0.0202		0.0202	0.0202	0.0000	1,019.0412	1,019.0412	0.0528	0.0110	1,023.6472
Mobile	0.2407	0.1669	2.7680	6.0400e-003	0.9675	2.1000e-003	0.9696	0.2571	1.9500e-003	0.2591	0.0000	617.6983	617.6983	0.0276	0.0201	624.3922
Waste						0.0000	0.0000		0.0000	0.0000	34.5085	0.0000	34.5085	2.0394	0.0000	85.4933
Water						0.0000	0.0000		0.0000	0.0000	0.5636	12.3141	12.8777	2.7400e-003	1.3200e-003	13.3401
<b>Total</b>	<b>1.9276</b>	<b>0.4330</b>	<b>3.0036</b>	<b>7.6400e-003</b>	<b>0.9675</b>	<b>0.0224</b>	<b>0.9899</b>	<b>0.2571</b>	<b>0.0222</b>	<b>0.2794</b>	<b>35.0720</b>	<b>1,649.0771</b>	<b>1,684.1491</b>	<b>2.1226</b>	<b>0.0325</b>	<b>1,746.8977</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.40</b>	<b>0.10</b>	<b>0.11</b>	<b>0.03</b>	<b>0.98</b>	<b>0.11</b>

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2407	0.1669	2.7680	6.0400e-003	0.9675	2.1000e-003	0.9696	0.2571	1.9500e-003	0.2591	0.0000	617.6983	617.6983	0.0276	0.0201	624.3922
Unmitigated	0.2407	0.1669	2.7680	6.0400e-003	0.9675	2.1000e-003	0.9696	0.2571	1.9500e-003	0.2591	0.0000	617.6983	617.6983	0.0276	0.0201	624.3922

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	1,070.01	593.40	63.95	2,592,072	2,592,072
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>1,070.01</b>	<b>593.40</b>	<b>63.95</b>	<b>2,592,072</b>	<b>2,592,072</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.576699	0.062678	0.184856	0.124808	0.021634	0.006348	0.000000	0.000000	0.000000	0.000000	0.022975	0.000000	0.000000
Other Asphalt Surfaces	0.558039	0.060650	0.178875	0.120770	0.020934	0.006143	0.012443	0.015691	0.000493	0.000199	0.022232	0.000895	0.002635
Parking Lot	0.558039	0.060650	0.178875	0.120770	0.020934	0.006143	0.012443	0.015691	0.000493	0.000199	0.022232	0.000895	0.002635

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	729.4166	729.4166	0.0472	5.7200e-003	732.3015
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	729.4166	729.4166	0.0472	5.7200e-003	732.3015
NaturalGas Mitigated	0.0293	0.2661	0.2235	1.6000e-003		0.0202	0.0202		0.0202	0.0202	0.0000	289.6246	289.6246	5.5500e-003	5.3100e-003	291.3457
NaturalGas Unmitigated	0.0293	0.2661	0.2235	1.6000e-003		0.0202	0.0202		0.0202	0.0202	0.0000	289.6246	289.6246	5.5500e-003	5.3100e-003	291.3457

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	5.42736e+006	0.0293	0.2661	0.2235	1.6000e-003		0.0202	0.0202		0.0202	0.0202	0.0000	289.6246	289.6246	5.5500e-003	5.3100e-003	291.3457
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0293</b>	<b>0.2661</b>	<b>0.2235</b>	<b>1.6000e-003</b>		<b>0.0202</b>	<b>0.0202</b>		<b>0.0202</b>	<b>0.0202</b>	<b>0.0000</b>	<b>289.6246</b>	<b>289.6246</b>	<b>5.5500e-003</b>	<b>5.3100e-003</b>	<b>291.3457</b>

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**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2yr)	5.42736e+006	0.0293	0.2661	0.2235	1.6000e-003		0.0202	0.0202		0.0202	0.0202	0.0000	289.6246	289.6246	5.5500e-003	5.3100e-003	291.3457
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0293</b>	<b>0.2661</b>	<b>0.2235</b>	<b>1.6000e-003</b>		<b>0.0202</b>	<b>0.0202</b>		<b>0.0202</b>	<b>0.0202</b>	<b>0.0000</b>	<b>289.6246</b>	<b>289.6246</b>	<b>5.5500e-003</b>	<b>5.3100e-003</b>	<b>291.3457</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	3.04075e+006	703.3952	0.0455	5.5200e-003	706.1771
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	112490	26.0215	1.6800e-003	2.0000e-004	26.1244
<b>Total</b>		<b>729.4166</b>	<b>0.0472</b>	<b>5.7200e-003</b>	<b>732.3015</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	3.04075e+006	703.3952	0.0455	5.5200e-003	706.1771
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	112490	26.0215	1.6800e-003	2.0000e-004	26.1244
<b>Total</b>		<b>729.4166</b>	<b>0.0472</b>	<b>5.7200e-003</b>	<b>732.3015</b>

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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6576	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0251
Unmitigated	1.6576	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0251

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1882					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4683					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0251
<b>Total</b>	<b>1.6576</b>	<b>1.1000e-004</b>	<b>0.0120</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0235</b>	<b>0.0235</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0251</b>

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1882					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4683					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0251
<b>Total</b>	<b>1.6576</b>	<b>1.1000e-004</b>	<b>0.0120</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0235</b>	<b>0.0235</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0251</b>

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**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.8777	2.7400e-003	1.3200e-003	13.3401
Unmitigated	14.7063	3.3300e-003	1.6400e-003	15.2788

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	1.99113 / 3.11457	14.7063	3.3300e-003	1.6400e-003	15.2788
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>14.7063</b>	<b>3.3300e-003</b>	<b>1.6400e-003</b>	<b>15.2788</b>



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**Mitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr			
Junior College (2yr)	1.5929 / 2.92458	12.8777	2.7400e-003	1.3200e-003	13.3401
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>12.8777</b>	<b>2.7400e-003</b>	<b>1.3200e-003</b>	<b>13.3401</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	34.5085	2.0394	0.0000	85.4933
Unmitigated	34.5085	2.0394	0.0000	85.4933

**8.2 Waste by Land Use**

**Unmitigated**

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	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	170	34.5085	2.0394	0.0000	85.4933
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>34.5085</b>	<b>2.0394</b>	<b>0.0000</b>	<b>85.4933</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	170	34.5085	2.0394	0.0000	85.4933
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>34.5085</b>	<b>2.0394</b>	<b>0.0000</b>	<b>85.4933</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

**New Proposed**  
**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**  
**San Bernardino-South Coast County, Mitigation Report**

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	12.05	12.43	17.72	19.51	12.69
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			

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No	Parking Policy Pricing	Unbundle Parking Costs	0.00	
No	Parking Policy Pricing	On-street Market Pricing	0.00	
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00	
No	Transit Improvements	Provide BRT System	0.00	
No	Transit Improvements	Expand Transit Network	0.00	
No	Transit Improvements	Increase Transit Frequency	0.00	
	Transit Improvements	Transit Improvements Subtotal	0.00	
		Land Use and Site Enhancement Subtotal	0.00	
No	Commute	Implement Trip Reduction Program		
No	Commute	Transit Subsidy		
No	Commute	Implement Employee Parking "Cash Out"		
No	Commute	Workplace Parking Charge		
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00	
No	Commute	Market Commute Trip Reduction Option	0.00	
No	Commute	Employee Vanpool/Shuttle	0.00	2.00
No	Commute	Provide Ride Sharing Program		
	Commute	Commute Subtotal	0.00	
No	School Trip	Implement School Bus Program	0.00	
		Total VMT Reduction	0.00	

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00

**New Proposed**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	

**New Proposed**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

No	Water Efficient Landscape	0.00	0.00
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**Solid Waste Mitigation**

Mitigation Measures	Input Value
Institute Recycling and Composting Services	
Percent Reduction in Waste Disposed	

## 4. Screening-Level Construction Localized Significance Thresholds Worksheets

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**Construction Localized Significance Thresholds: P1 Demolition**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	1	25	82	25	82	13.89

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment U Daily Hours	Acres
25		Tractors	0.5	0.0625	0
NOx	118	Graders	0.5	0.0625	0
CO	863	Dozers	0.5	0.0625	1
PM10	5.00	Scrapers	1	0.125	0
PM2.5	4.00				1.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10		863	1328	2423	5691	23065
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5		5	14	44	103	280
	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
<b>1.00 Acres</b>						
	25	50	100	200	500	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P1 All Overlap**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	5	25	82	25	82	13.89

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment U	Daily Hours	Acres
25		Tractors	0.5	6	8	3
NOx	270	Graders	0.5	1	8	0.5
CO	2,193	Dozers	0.5	6	8	3
PM10	15.99	Scrapers	1			0
PM2.5	9.00					6.50

	Acres	25	50	100	200	500
NOx	5	270	303	378	486	778
	5	270	303	378	486	778
	5	270	303	378	486	778
CO	5	2193	2978	5188	9611	29410
	5	2193	2978	5188	9611	29410
	5	2193	2978	5188	9611	29410
PM10	5	16	50	80	140	322
	5	16	50	80	140	322
	5	16	50	80	140	322
PM2.5	5	9	12	21	45	170
	5	9	12	21	45	170
	5	9	12	21	45	170

Northwest San Bernardino Valley

**5.00 Acres**

NOx	270	303	378	486	778
CO	2193	2978	5188	9611	29410
PM10	16	50	80	140	322
PM2.5	9	12	21	45	170

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	5	32	5
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P1 Site Preparation**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)	
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)		
32	3.50	25	82	25	82	13.89	
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment</b>	<b>Daily Hours</b>	<b>Acres</b>	
	25	Tractors	0.5	0.0625	4	8	2
<b>NOx</b>	<b>220</b>	Graders	0.5	0.0625			0
<b>CO</b>	<b>1,712</b>	Dozers	0.5	0.0625	3	8	1.5
<b>PM10</b>	<b>10.99</b>	Scrapers	1	0.125			0
<b>PM2.5</b>	<b>7.00</b>						0
						<b>Acres</b>	<b>3.50</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	3	203	234	301	414	715	
	4	237	269	340	450	747	
		220	252	321	432	731	
CO	3	1552	2244	3875	7722	26315	
	4	1873	2611	4531	8667	27863	
		1713	2428	4203	8195	27089	
PM10	3	9	29	49	91	214	
	4	13	40	65	115	268	
		11	35	57	103	241	
PM2.5	3	6	9	16	39	157	
	4	8	11	19	42	163	
		7	10	18	41	160	
Northwest San Bernardino Valley	<b>3.50 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>		
NOx	220	252	321	432	731		
CO	1713	2428	4203	8195	27089		
PM10	11	35	57	103	241		
PM2.5	7	10	18	41	160		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	3	32	4
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P1 Grading**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	4.00	25	82	25	82	13.89
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment</b>	<b>Daily Hours</b>	<b>Acres</b>
25		Tractors	0.5	0.0625	2	8
NOx	237	Graders	0.5	0.0625	1	8
CO	1,872	Dozers	0.5	0.0625	1	8
PM10	12.66	Scrapers	1	0.125	2	8
PM2.5	7.67					Acres
						4.00
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	4	237	269	340	450	747
	4	237	269	340	450	747
		237	269	340	450	747
CO	4	1873	2611	4531	8667	27863
	4	1873	2611	4531	8667	27863
		1873	2611	4531	8667	27863
PM10	4	13	40	65	115	268
	4	13	40	65	115	268
		13	40	65	115	268
PM2.5	4	8	11	19	42	163
	4	8	11	19	42	163
		8	11	19	42	163
Northwest San Bernardino Valley	<b>4.00 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	237	269	340	450	747	
CO	1873	2611	4531	8667	27863	
PM10	13	40	65	115	268	
PM2.5	8	11	19	42	163	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	4	32	4
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P1 Building Construction**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)	
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)		
32	1.31	25	82	25	82	13.89	
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment</b>	<b>Daily Hours</b>	<b>Acres</b>	
	25	Tractors	0.5	0.0625	3	7	1.3125
<b>NOx</b>	<b>134</b>	Graders	0.5	0.0625			0
<b>CO</b>	<b>978</b>	Dozers	0.5	0.0625			0
<b>PM10</b>	<b>5.31</b>	Scrapers	1	0.125			0
<b>PM2.5</b>	<b>4.31</b>						1.31
					<b>Acres</b>		
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	1	118	148	211	334	652	
	2	170	200	263	378	684	
		134	164	227	348	662	
CO	1	863	1328	2423	5691	23065	
	2	1232	1877	3218	6778	24768	
		978	1500	2671	6031	23597	
PM10	1	5	14	44	103	280	
	2	6	19	34	66	160	
		5	16	41	91	243	
PM2.5	1	4	6	12	32	141	
	2	5	8	14	36	150	
		4	7	13	33	144	
Northwest San Bernardino Valley	<b>1.31 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>		
NOx	134	164	227	348	662		
CO	978	1500	2671	6031	23597		
PM10	5	16	41	91	243		
PM2.5	4	7	13	33	144		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P1 Paving**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.00	25	82	25	82	13.89
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Daily hours</b>	<b>Equipment Used</b>	<b>Acres</b>
	25	Tractors	0.5	0.0625		0
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625		0
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625		0
<b>PM10</b>	<b>5.00</b>	Scrapers	1	0.125		0
<b>PM2.5</b>	<b>4.00</b>				<b>Acres</b>	<b>0.00</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141
Northwest San Bernardino Valley	<b>0.00 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P1 Architectural Coating**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.00	25	82	25	82	13.89

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres
25		Tractors	0.5	0.0625		0
NOx 118		Graders	0.5	0.0625		0
CO 863		Dozers	0.5	0.0625		0
PM10 5.00		Scrapers	1	0.125		0
PM2.5 4.00					Acres	0.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.00 Acres**

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P2 Demolition**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	1.23	25	82	43	140	1.23
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	3	8	1.5
<b>NOx</b>	<b>130</b>	Graders	0.5			0
<b>CO</b>	<b>946</b>	Dozers	0.5	1	8	0.5
<b>PM10</b>	<b>12.22</b>	Scrapers	1			0.0
<b>PM2.5</b>	<b>5.80</b>					2.00
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		130	160	223	344	659
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		946	1452	2602	5936	23449
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		5	15	42	95	253
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		4	6	12	33	143
Northwest San Bernardino Valley	<b>1.23 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	130	160	223	344	659	
CO	946	1452	2602	5936	23449	
PM10	5	15	42	95	253	
PM2.5	4	6	12	33	143	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008



**Construction Localized Significance Thresholds: P2 Site Preparation**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	1.23	25	82	43	140	1.23

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres	
25		Tractors	0.5	0.0625	1	8	0.5
NOx	130	Graders	0.5	0.0625	1	8	0.5
CO	946	Dozers	0.5	0.0625	1	7	0.4375
PM10	12.22	Scrapers	1	0.125			0
PM2.5	5.80						1.44

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
CO	1	130	160	223	344	659
	2	863	1328	2423	5691	23065
PM10	1	1232	1877	3218	6778	24768
	2	946	1452	2602	5936	23449
PM2.5	1	5	14	44	103	280
	2	6	19	34	66	160
	1	5	15	42	95	253
	2	4	6	12	32	141
	1	4	6	12	36	150
	2	5	8	14	33	143
	1	4	6	12	33	143
	2	5	8	14	36	150

Northwest San Bernardino Valley

**1.23 Acres**

	25	50	100	200	500
NOx	130	160	223	344	659
CO	946	1452	2602	5936	23449
PM10	5	15	42	95	253
PM2.5	4	6	12	33	143

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P2 Grading**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	1.23	25	82	43	140	1.23

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres	
25		Tractors	0.5	0.0625	2	7	0.875
NOx	130	Graders	0.5	0.0625	1	8	0.5
CO	946	Dozers	0.5	0.0625	1	8	0.5
PM10	12.22	Scrapers	1	0.125			0
PM2.5	5.80						1.88

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
CO	1	130	160	223	344	659
	2	863	1328	2423	5691	23065
PM10	1	1232	1877	3218	6778	24768
	2	946	1452	2602	5936	23449
PM2.5	1	5	14	44	103	280
	2	6	19	34	66	160
	5	15	42	95	253	253
	1	4	6	12	32	141
	2	5	8	14	36	150
	4	4	6	12	33	143

Northwest San Bernardino Valley

**1.23 Acres**

	25	50	100	200	500
NOx	130	160	223	344	659
CO	946	1452	2602	5936	23449
PM10	5	15	42	95	253
PM2.5	4	6	12	33	143

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

### Construction Localized Significance Thresholds: P2 Building Construction

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.38	25	82	43	140	1.23

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day		Equipment Used	Daily Hours	Acres
25		Tractors	0.5		1	6	0.375
NOx	118	Graders	0.5				0
CO	863	Dozers	0.5				0
PM10	11.36	Scrapers	1				0
PM2.5	5.41					Acres	0.38

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.38 Acres**

	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P2 Paving**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.50	25	82	43	140	1.23
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	1	8	0.5
<b>NOx</b>	<b>118</b>	Graders	0.5			0
<b>CO</b>	<b>863</b>	Dozers	0.5			0
<b>PM10</b>	<b>11.36</b>	Scrapers	1			0
<b>PM2.5</b>	<b>5.41</b>					0
					<b>Acres</b>	<b>0.50</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
<b>0.50 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P2 Architectural Coating**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.00	25	82	43	140	1.23
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	0.0625		0
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625		0
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625		0
<b>PM10</b>	<b>11.36</b>	Scrapers	1	0.125		0
<b>PM2.5</b>	<b>5.41</b>				<b>Acres</b>	<b>0.00</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
<b>0.00 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: Phase 2 All Overlap**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	1.23	25	82	43	140	1.23
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	5	8	2.5
<b>NOx</b>	<b>130</b>	Graders	0.5	2	8	1
<b>CO</b>	<b>946</b>	Dozers	0.5	2	8	1
<b>PM10</b>	<b>12.22</b>	Scrapers	1			0
<b>PM2.5</b>	<b>5.80</b>					4.50
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		130	160	223	344	659
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		946	1452	2602	5936	23449
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		5	15	42	95	253
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		4	6	12	33	143
Northwest San Bernardino Valley	<b>1.23 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	130	160	223	344	659	
CO	946	1452	2602	5936	23449	
PM10	5	15	42	95	253	
PM2.5	4	6	12	33	143	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P3 Site Preparation**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.30	25	82	43	140	0.30
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	1	8	0.5
<b>NOx</b>	<b>118</b>	Graders	0.5	1	8	0.5
<b>CO</b>	<b>863</b>	Dozers	0.5			0
<b>PM10</b>	<b>11.36</b>	Scrapers	1			0
<b>PM2.5</b>	<b>5.41</b>					1.00
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141
Northwest San Bernardino Valley						
<b>0.30 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

### Construction Localized Significance Thresholds: P3 Grading

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.30	25	82	43	140	0.30
<b>Northwest San Bernardino Valley Equipment</b>						
Source Receptor Distance (meters)	25	Equipment	Acres/8-hr Day	Equipment U	Daily Hours	Acres
NOx	118	Tractors	0.5	0.0625	1 7	0.4375
CO	863	Graders	0.5	0.0625	1 6	0.375
PM10	11.36	Dozers	0.5	0.0625	1 6	0.375
PM2.5	5.41	Scrapers	1	0.125		0
					<b>Acres</b>	1.19
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
<b>0.30 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008



**Construction Localized Significance Thresholds: P3 Buiding Construction**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.30	25	82	43	140	0.30

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres
25		Tractors	0.5	2	8	1
NOx 118		Graders	0.5			0
CO 863		Dozers	0.5			0
PM10 11.36		Scrapers	1			0
PM2.5 5.41						1.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.30 Acres**

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

### Construction Localized Significance Thresholds: P3 Paving

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.30	25	82	43	140	0.30

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres
25		Tractors	0.5	1	7	0.4375
NOx	118	Graders	0.5			0
CO	863	Dozers	0.5			0
PM10	11.36	Scrapers	1			0
PM2.5	5.41					0.44

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.30 Acres**

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P3 Architectural Coating**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.00	25	82	43	140	0.30

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment L Daily Hours	Acres
25		Tractors	0.5	0.0625	0
NOx 118		Graders	0.5	0.0625	0
CO 863		Dozers	0.5	0.0625	0
PM10 11.36		Scrapers	1	0.125	0
PM2.5 5.41					0.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

	0.00 Acres	25	50	100	200	500
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: Phase 3 All Overlap**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.30	25	82	43	140	0.30

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment L Daily Hours	Acres
25		Tractors	0.5	0.0625	0
NOx 118		Graders	0.5	0.0625	0
CO 863		Dozers	0.5	0.0625	0
PM10 11.36		Scrapers	1	0.125	0
PM2.5 5.41					0.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.30 Acres**

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P4 Demolition**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)	
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)		
32	0.73	25	82	43	140	0.73	
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Daily hours</b>	<b>Equipment Used</b>	<b>Acres</b>	
	25	Tractors	0.5	0.0625	2	8	1
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625			0
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625	1	8	0.5
<b>PM10</b>	<b>11.36</b>	Scrapers	1	0.125			0
<b>PM2.5</b>	<b>5.41</b>					<b>Acres</b>	<b>1.50</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	1	118	148	211	334	652	
	1	118	148	211	334	652	
		118	148	211	334	652	
CO	1	863	1328	2423	5691	23065	
	1	863	1328	2423	5691	23065	
		863	1328	2423	5691	23065	
PM10	1	5	14	44	103	280	
	1	5	14	44	103	280	
		5	14	44	103	280	
PM2.5	1	4	6	12	32	141	
	1	4	6	12	32	141	
		4	6	12	32	141	
Northwest San Bernardino Valley							
<b>0.73 Acres</b>							
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>		
NOx	118	148	211	334	652		
CO	863	1328	2423	5691	23065		
PM10	5	14	44	103	280		
PM2.5	4	6	12	32	141		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P4 Site Preparation**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)	
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)		
32	0.73	25	82	43	140	0.73	
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>	
	25	Tractors	0.5	0.0625	1	8	0.5
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625	1	8	0.5
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625			0.0
<b>PM10</b>	<b>11.36</b>	Scrapers	1	0.125			0.0
<b>PM2.5</b>	<b>5.41</b>						1.00
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	1	118	148	211	334	652	
	1	118	148	211	334	652	
		118	148	211	334	652	
CO	1	863	1328	2423	5691	23065	
	1	863	1328	2423	5691	23065	
		863	1328	2423	5691	23065	
PM10	1	5	14	44	103	280	
	1	5	14	44	103	280	
		5	14	44	103	280	
PM2.5	1	4	6	12	32	141	
	1	4	6	12	32	141	
		4	6	12	32	141	
Northwest San Bernardino Valley							
<b>0.73 Acres</b>							
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>		
NOx	118	148	211	334	652		
CO	863	1328	2423	5691	23065		
PM10	5	14	44	103	280		
PM2.5	4	6	12	32	141		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P4 Grading**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.73	25	82	43	140	0.73

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres
25		Tractors	0.5	0.0625	1	7
118		Graders	0.5	0.0625	1	6
863		Dozers	0.5	0.0625	1	6
11.36		Scrapers	1	0.125		0
5.41						1.19

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.73 Acres**

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P4 Building Construction**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.73	25	82	43	140	0.73

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres	
25		Tractors	0.5	0.0625	2	8	1
NOx	118	Graders	0.5	0.0625			0
CO	863	Dozers	0.5	0.0625			0
PM10	11.36	Scrapers	1	0.125			0
PM2.5	5.41						1.00

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.73 Acres**

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008



### Construction Localized Significance Thresholds: P4 Paving

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.44	25	82	43	140	0.73

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres
25		Tractors	0.5	1	7	0.4375
NOx	118	Graders	0.5			0
CO	863	Dozers	0.5			0
PM10	11.36	Scrapers	1			0
PM2.5	5.41					0.44

	Acres	25	50	100	200	500
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141

Northwest San Bernardino Valley

**0.44 Acres**

	25	50	100	200	500
NOx	118	148	211	334	652
CO	863	1328	2423	5691	23065
PM10	5	14	44	103	280
PM2.5	4	6	12	32	141

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P4 Architectural Coating**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.00	25	82	43	140	0.73
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	0.0625		0
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625		0
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625		0
<b>PM10</b>	<b>11.36</b>	Scrapers	1	0.125		0
<b>PM2.5</b>	<b>5.41</b>				<b>Acres</b>	<b>0.00</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
<b>0.00 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: Phase 4 All Overlap**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.73	25	82	43	140	0.73
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	0.0625		0
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625		0
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625		0
<b>PM10</b>	<b>11.36</b>	Scrapers	1	0.125		0
<b>PM2.5</b>	<b>5.41</b>				<b>Acres</b>	<b>0.00</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
	1	118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
	1	5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
	1	4	6	12	32	141
Northwest San Bernardino Valley	<b>0.73 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P5 Demolition**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	2.50	25	82	25	82	17.30
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	3	8	1.5
NOx	187	Graders	0.5			0
CO	1,392	Dozers	0.5	2	8	1
PM10	7.66	Scrapers	1			0
PM2.5	5.67					0
					<b>Acres</b>	<b>2.50</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	2	170	200	263	378	684
	3	203	234	301	414	715
		187	217	282	396	700
CO	2	1232	1877	3218	6778	24768
	3	1552	2244	3875	7722	26315
		1392	2061	3546	7250	25542
PM10	2	6	19	34	66	160
	3	9	29	49	91	214
		8	24	42	78	187
PM2.5	2	5	8	14	36	150
	3	6	9	16	39	157
		6	9	15	38	153
Northwest San Bernardino Valley	<b>2.50 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	187	217	282	396	700	
CO	1392	2061	3546	7250	25542	
PM10	8	24	42	78	187	
PM2.5	6	9	15	38	153	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	2	32	3
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P5 Site Preparation**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	3.50	25	82	25	82	17.30
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	3	8	1.5
NOx	220	Graders	0.5			0
CO	1,712	Dozers	0.5	4	8	2
PM10	10.99	Scrapers	1			0
PM2.5	7.00					0
					<b>Acres</b>	<b>3.50</b>
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	3	203	234	301	414	715
	4	237	269	340	450	747
		220	252	321	432	731
CO	3	1552	2244	3875	7722	26315
	4	1873	2611	4531	8667	27863
		1713	2428	4203	8195	27089
PM10	3	9	29	49	91	214
	4	13	40	65	115	268
		11	35	57	103	241
PM2.5	3	6	9	16	39	157
	4	8	11	19	42	163
		7	10	18	41	160
Northwest San Bernardino Valley	<b>3.50 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	220	252	321	432	731	
CO	1713	2428	4203	8195	27089	
PM10	11	35	57	103	241	
PM2.5	7	10	18	41	160	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	3	32	4
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P5 Grading**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	4.00	25	82	25	82	17.30

Source Receptor Distance (meters)	Northwest San Bernardino Valley	Equipment	Acres/8-hr Day	Equipment Used	Daily Hours	Acres
25		Tractors	0.5	2	8	1
NOx	237	Graders	0.5	1	8	0.5
CO	1,872	Dozers	0.5	1	8	0.5
PM10	12.66	Scrapers	1	2	8	2
PM2.5	7.67					4.00

	Acres	25	50	100	200	500
NOx	4	237	269	340	450	747
	4	237	269	340	450	747
	4	237	269	340	450	747
CO	4	1873	2611	4531	8667	27863
	4	1873	2611	4531	8667	27863
	4	1873	2611	4531	8667	27863
PM10	4	13	40	65	115	268
	4	13	40	65	115	268
	4	13	40	65	115	268
PM2.5	4	8	11	19	42	163
	4	8	11	19	42	163
	4	8	11	19	42	163
Northwest San Bernardino Valley						
<b>4.00 Acres</b>						
	25	50	100	200	500	
NOx	237	269	340	450	747	
CO	1873	2611	4531	8667	27863	
PM10	13	40	65	115	268	
PM2.5	8	11	19	42	163	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	4	32	4
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P5 Building Construction**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	1.31	25	82	25	82	17.30
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	3	7	1.3125
<b>NOx</b>	<b>134</b>	Graders	0.5			0
<b>CO</b>	<b>978</b>	Dozers	0.5			0
<b>PM10</b>	<b>5.31</b>	Scrapers	1			0
<b>PM2.5</b>	<b>4.31</b>					1.31
	Acres	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	2	170	200	263	378	684
		134	164	227	348	662
CO	1	863	1328	2423	5691	23065
	2	1232	1877	3218	6778	24768
		978	1500	2671	6031	23597
PM10	1	5	14	44	103	280
	2	6	19	34	66	160
		5	16	41	91	243
PM2.5	1	4	6	12	32	141
	2	5	8	14	36	150
		4	7	13	33	144
Northwest San Bernardino Valley	<b>1.31 Acres</b>					
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	134	164	227	348	662	
CO	978	1500	2671	6031	23597	
PM10	5	16	41	91	243	
PM2.5	4	7	13	33	144	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	2
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: P5 Paving**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.00	25	82	25	82	17.30
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	0.0625		0
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625		0
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625		0
<b>PM10</b>	<b>5.00</b>	Scrapers	1	0.125		0
<b>PM2.5</b>	<b>4.00</b>				<b>Acres</b>	<b>0.00</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
<b>0.00 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008



**Construction Localized Significance Thresholds: P5 Architectural Coating**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	0.00	25	82	25	82	17.30
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	0.0625		0
<b>NOx</b>	<b>118</b>	Graders	0.5	0.0625		0
<b>CO</b>	<b>863</b>	Dozers	0.5	0.0625		0
<b>PM10</b>	<b>5.00</b>	Scrapers	1	0.125		0
<b>PM2.5</b>	<b>4.00</b>				<b>Acres</b>	<b>0.00</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	1	118	148	211	334	652
	1	118	148	211	334	652
		118	148	211	334	652
CO	1	863	1328	2423	5691	23065
	1	863	1328	2423	5691	23065
		863	1328	2423	5691	23065
PM10	1	5	14	44	103	280
	1	5	14	44	103	280
		5	14	44	103	280
PM2.5	1	4	6	12	32	141
	1	4	6	12	32	141
		4	6	12	32	141
Northwest San Bernardino Valley						
<b>0.00 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	118	148	211	334	652	
CO	863	1328	2423	5691	23065	
PM10	5	14	44	103	280	
PM2.5	4	6	12	32	141	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	1	32	1
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

**Construction Localized Significance Thresholds: Phase 5 All Overlap**

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
32	5.00	25	82	25	82	17.30
<b>Source Receptor Distance (meters)</b>	<b>Northwest San Bernardino Valley</b>	<b>Equipment</b>	<b>Acres/8-hr Day</b>	<b>Equipment Used</b>	<b>Daily Hours</b>	<b>Acres</b>
	25	Tractors	0.5	6	8	3
<b>NOx</b>	<b>270</b>	Graders	0.5	1	8	0.5
<b>CO</b>	<b>2,193</b>	Dozers	0.5	6	8	3
<b>PM10</b>	<b>15.99</b>	Scrapers	1	2	8	2
<b>PM2.5</b>	<b>9.00</b>				<b>Acres</b>	<b>8.50</b>
	<b>Acres</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>
NOx	5	270	303	378	486	778
	5	270	303	378	486	778
		270	303	378	486	778
CO	5	2193	2978	5188	9611	29410
	5	2193	2978	5188	9611	29410
		2193	2978	5188	9611	29410
PM10	5	16	50	80	140	322
	5	16	50	80	140	322
		16	50	80	140	322
PM2.5	5	9	12	21	45	170
	5	9	12	21	45	170
		9	12	21	45	170
Northwest San Bernardino Valley						
<b>5.00 Acres</b>						
	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	
NOx	270	303	378	486	778	
CO	2193	2978	5188	9611	29410	
PM10	16	50	80	140	322	
PM2.5	9	12	21	45	170	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
32	5	32	5
<b>Distance Increment Below</b>			
25			
<b>Distance Increment Above</b>			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## **Appendix C      Construction Health Risk Assessment**

## Appendices

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# 1. Construction Health Risk Assessment

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## 1.1 INTRODUCTION

The Chaffey Community College District (District) is proposing the redevelopment and modernization of the existing Chaffey College Rancho Cucamonga campus. The approximately 200-acre campus is in the City of Rancho Cucamonga, San Bernardino County, California. It is bounded by Haven Avenue to the west, residences to the east, Wilson Avenue to the north, and Banyan Street to the south. The project would result in demolition of some of the existing campus buildings, construction of new campus buildings, and renovation of some of the existing campus buildings and facilities. Overall, the proposed project would involve demolition, site preparation, grading, trenching, building construction, architectural coating, and paving. The following provides the background methodology used for the construction health risk assessment for the proposed project.

Project construction would occur over 5 development phases and is anticipated to take place between year 2026 and year 2050. Construction would not occur continuously over this period, but is anticipated to occur in years 2026, 2027, 2030, 2031, 2038, 2042, 2049, and 2050 (approximately 1,243 total workdays over a 25-year span). While the projected buildout of Phase 5 is anticipated for year 2051, for purposes of this analysis, a buildout year of 2050 is utilized because it is the latest year in which the California Emissions Estimator Model (CalEEMod) has on-road vehicle emissions data available. In general, vehicle emission rates decrease each passing year due to the assumption that older vehicles are replaced by newer cleaner vehicles. Based on this general trend, use of year 2050 emissions data would be either similar to or slightly more conservative compared to year 2051 emissions data if it was available.

The nearest off-site sensitive receptors to the project site include the surrounding single-family residences to the east and students Banyan Elementary School near the southeast quadrant of the campus. Guidance from the California Environmental Protection Agency (Cal/EPA), Office of Environmental Health Hazard Assessment (OEHHA), and California Air Pollution Control Officers Association (CAPCOA) recommend the completion of health risk assessments (HRA) to determine the impacts of hazardous air emissions upon sensitive receptors in the vicinity of the project. As a result, a site-specific construction health risk assessment (HRA) has been prepared for the proposed project. This HRA considers the health impact to sensitive receptors (adults and children in the nearby residences and school site) of construction emissions at the project site from diesel equipment exhaust (diesel particulate matter or DPM).

## 1.2 METHODOLOGY AND SIGNIFICANCE THRESHOLDS

For this HRA, the South Coast Air Quality Management District (South Coast AQMD) significance thresholds were deemed to be appropriate and the thresholds that were used for this project are shown below:

- Excess cancer risk of more than 10 in a million
- Non-cancer hazard index (chronic or acute) greater than 1.0

The methodology used in this HRA is consistent with the following OEHHA guidance documents:

- OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments*. February, 2015.

Potential exposures to DPM from project construction was evaluated for off-site sensitive receptors in close proximity to the site. Pollutant concentrations were estimated using an air dispersion model, and excess lifetime cancer risks and chronic non-cancer hazard indexes were calculated. These risks were then compared to the significance thresholds adopted for this HRA.

It should be noted that these health impacts are based on conservative (i.e., health protective) assumptions. The United States Environmental Protection Agency (USEPA 2005) and the Office of Environmental Health Hazard Assessment (OEHHA 2015) note that conservative assumptions used in a risk assessment are intended to ensure that the estimated risks do not underestimate the actual risks. Therefore, the estimated risks may not necessarily represent actual risks experienced by populations at or near a site. The use of conservative assumptions tends to produce upper-bound estimates of exposure and thus risk.

For residential-based receptors, the following conservative assumptions were used:

- It was assumed that maximum-exposed off-site residential receptors (both children and adults) stood outdoors and are subject to DPM at their residence for 8 hours per day, and approximately 260 construction days per year. In reality, California residents typically will spend on average 2 hours per day outdoors at their residences (USEPA 2011). This would result in lower exposures to construction related DPM emissions and lower estimated risk values.
- The calculated risk for infants from third trimester to age 2 is multiplied by a factor of 10 to account for early life exposure and uncertainty in child versus adult exposure impacts (OEHHA 2015).

For school-based receptors, the following conservative assumptions were used:

- It was assumed that maximum-exposed school receptors (Banyan Elementary School at 10900 Mirador Drive, offering kindergarten through 6<sup>th</sup> grade) stood outdoors and are subject to DPM for 8 hours per day, and approximately 180 school days per year. In reality, students are exposed to outdoor pollutant concentration levels for a portion of the day and are exposed to reduced indoor pollutant concentrations for the remaining hours. This would result in lower estimated risk values.
- The calculated risk for students age 2 to 16 is multiplied by a factor of 3 to account for early life exposure and uncertainty in child versus adult exposure impacts (OEHHA 2015).

### 1.3 CONSTRUCTION EMISSIONS

Construction emissions were calculated as average daily emissions in pounds per day, using the proposed construction schedule and CalEEMod Version 2020.4.0 (CAPCOA 2021). Construction modeling considered

years 2026-2027 for Phase 1 construction activities, years 2030-2031 for Phase 2, year 2038 for Phase 3, year 2042 for Phase 4, and years 2049-2050 for Phase 5. DPM emissions were based on the CalEEMod construction runs, using annual exhaust PM<sub>10</sub> construction emissions presented in pounds (lbs) per day.

The project was assumed to have a cumulative duration of 1,243 workdays between January 2026 and July 2050. The average daily emission rates from construction equipment used during the proposed project were determined by dividing the annual average emissions for each construction year by the number of construction days per year for each calendar year of construction (i.e., 2026, 2027, 2030, 2031, 2038, 2042, 2049, and 2050). The off-site hauling emission rates were adjusted to evaluate localized emissions from the 2.35-mile haul route within 1,000 feet of the project site. The CalEEMod construction emissions output and emission rate calculations are provided in Appendix A of the HRA.

## 1.4 DISPERSION MODELING

Air quality modeling was performed using the AERMOD atmospheric dispersion model to assess the impact of emitted compounds on sensitive receptors near the project. The model is a steady state Gaussian plume model and is an approved model by South Coast AQMD for estimating ground level impacts from point and fugitive sources in simple and complex terrain. The on-site construction emissions for the project were modeled as poly-area sources. The off-site mobile sources were modeled as adjacent line volume sources. The model requires additional input parameters, including chemical emission data and local meteorology. Inputs for the construction emission rates are those described in Section 1.3. Meteorological data obtained from the South Coast AQMD for the nearest representative meteorological station (Upland) with the five latest available years (2012 to 2016) of record were used to represent local weather conditions and prevailing winds (South Coast AQMD 2022). The prevailing wind direction at the Upland meteorological station is to the east-northeast, and the wind rose is provided in Appendix A.

The modeling analysis also considered the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. To accommodate the model's Cartesian grid format, direction-dependent calculations were obtained by identifying the Universal Transverse Mercator (UTM) coordinates for each source location. In addition, digital elevation model (DEM) data for the area were obtained and included in the model runs to account for complex terrain. An emission release height of 4.15 meters was used as representative of the stack exhaust height for off-road construction equipment and diesel truck traffic, and an initial vertical dispersion parameter of 1.93 m was used, per California Air Resources Board (CARB) guidance (2000).

To determine contaminant impacts during construction hours, the model's Hour-By-Day-of-Week (HRDOW) scalar option was invoked to predict ground level concentrations for construction emissions generated from Monday through Friday between the hours of 7:00 AM and 4:00 PM with a 1-hour lunch break.

A unit emission rate of 1 gram per second was used for all modeling runs. The unit emission rates were proportioned over the poly-area sources for on-site construction emissions and divided between the volume sources for off-site hauling emissions. The maximum modeled concentrations from the output files were then multiplied by the emission rates calculated in Appendix A to obtain the maximum flagpole-level concentrations at the off-site maximum exposed individual resident (MEIR). As shown in Figure 1, the MEIR is the single-family residence at the of the Antietam Drive cul-de-sac along the eastern boundary of the

campus while the maximum exposed school receptor lies within the northwestern portion of the Banyan Elementary School campus situated across Banyan Street near the southeast corner of the Rancho Cucamonga campus. The maximum exposed receptor location is the receptor location associated with the maximum AERMOD predicted DPM concentrations from the on-site emission source because the calculated on-site emission rates are approximately one to two orders of magnitude higher than the calculated off-site emission rates (see Appendix A). Therefore, the maximum concentrations associated with the on-site emission sources produce the highest overall ground-level maximum exposed receptor concentrations and, consequently, highest calculated health risks. Furthermore, the overall MEIR and maximum exposed school receptor are based on the MEIR and maximum exposed school receptor determined for Phase 1 due to the overall anticipated active construction areas, the construction intensities, and having the highest on-road and off-road emission rates because it would occur the earliest out of the five development phases.

The air dispersion model output for the emission sources is presented in Appendix B. The DPM concentrations at the MEIR and maximum exposed school receptor are provided in Appendix C.

## **1.5 RISK CHARACTERIZATION**

### **1.5.1 Carcinogenic Chemical Risk**

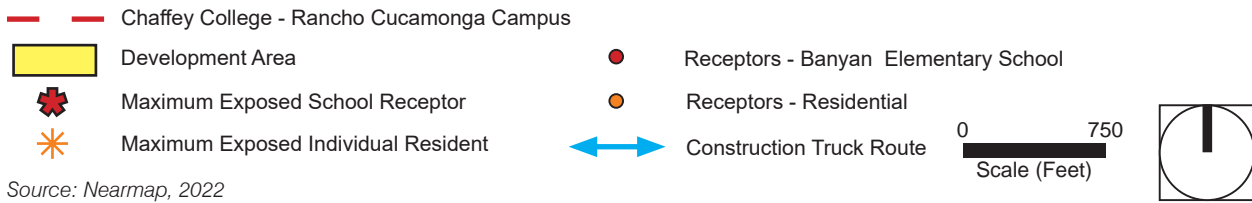
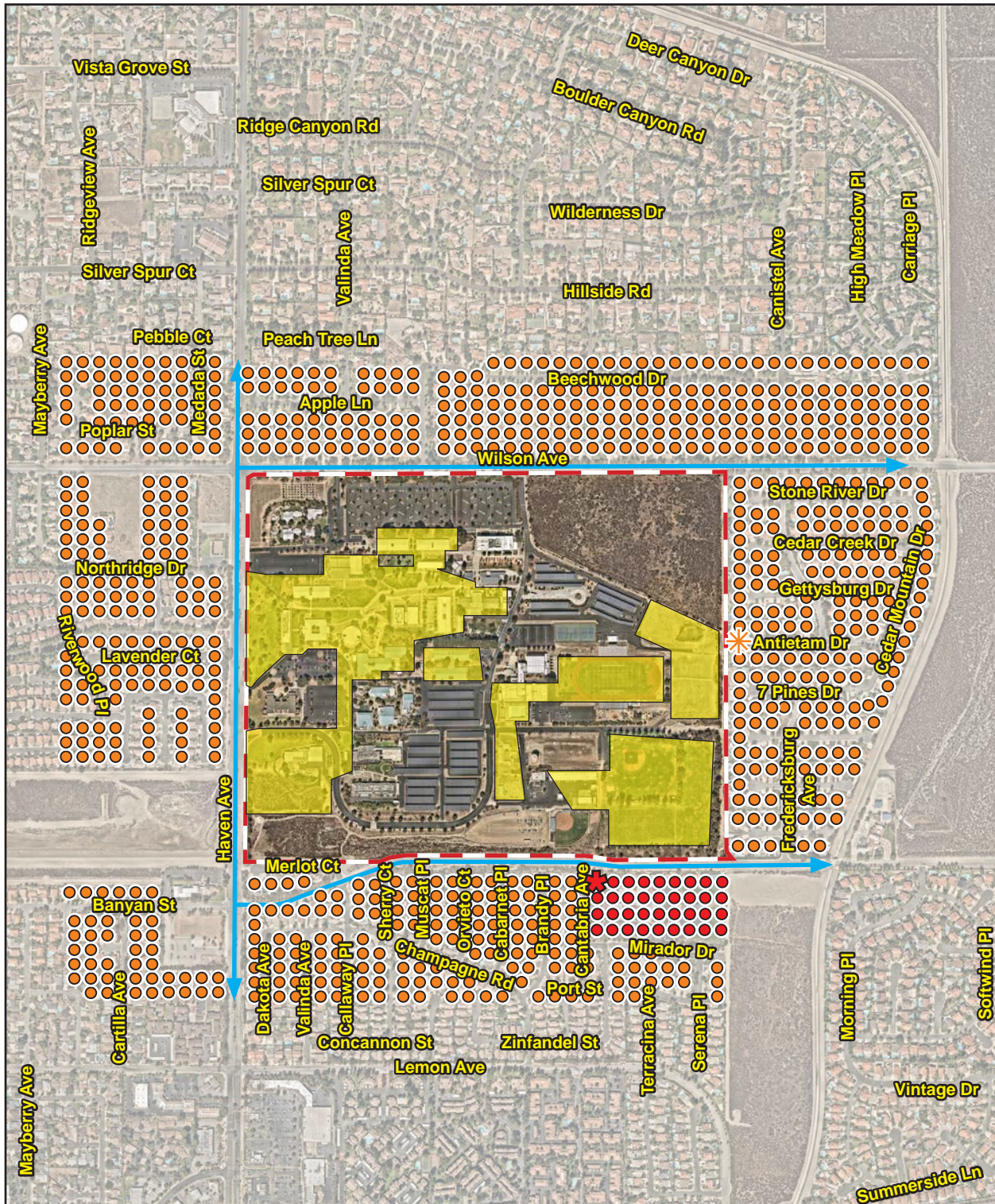
Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Therefore, any exposure will have some associated risk. The South Coast AQMD has established a maximum incremental cancer risk of 10 in a million ( $1 \times 10^{-5}$  or  $10 \times 10^{-6}$ ) for CEQA projects and the OEHHA also sets a typical risk management level as 10 in a million (OEHHA 2015).

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The cancer risk probability is determined by multiplying the chemical's annual concentration by its cancer potency factor (CPF), a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It is an upper-limit estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ), averaged over a lifetime of 70 years.

Recent guidance from OEHHA recommends a refinement to the standard point estimate approach with the use of age-specific breathing rates and age sensitivity factors (ASFs) to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day ( $\text{mg}/\text{kg}/\text{day}$ )<sup>-1</sup> to derive the cancer risk estimate. Therefore, the following dose algorithm was used to accommodate the unique exposures associated with each receptor type.



Figure 1 - Project Sources and Off-Site Receptor Locations



Source: Nearmap, 2022

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$$\text{Dose}_{\text{AIR,per age group}} = (C_{\text{air}} \times \text{EF} \times \left[\frac{\text{BR}}{\text{BW}}\right] \times A \times \text{CF})$$

Where:

- Dose<sub>AIR</sub> = dose by inhalation (mg/kg-day), per age group
- C<sub>air</sub> = concentration of contaminant in air (µg/m<sup>3</sup>)
- EF = exposure frequency (number of days/365 days)
- BR/BW = daily breathing rate normalized to body weight (L/kg-day)
- A = inhalation absorption factor (default = 1)
- CF = conversion factor (1x10<sup>-6</sup>, µg to mg, L to m<sup>3</sup>)

The inhalation absorption factor (A) is a unitless factor that is only used if the cancer potency factor included a correction for absorption across the lung. The default value of 1 was used for this assessment. For residential receptors, the exposure frequency (EF) of 0.96 is used to represent 350 days per year to allow for a two-week period away from home each year (OEHHA 2015). For Banyan Elementary School, an EF of 0.49 is used to represent the traditional school calendar of 180 days per year (OEHHA, 2004).

For construction analysis, the residential exposure duration spans the length of construction (e.g., 1,243 work total days over 25-year span). The 95<sup>th</sup> percentile daily breathing rates (BR/BW), exposure duration (ED), age sensitivity factors (ASFs), and fraction of time at home (FAH) for the various age groups are provided herein:

<u>Age Groups</u>	<u>BR/BW (L/kg-day)</u>	<u>ED</u>	<u>ASF</u>	<u>FAH</u>
Third trimester	361	0.25	10	0.85
0-2 age group	1,090	1.28	10	0.85
2-9 age group	861	0.94	3	0.72
2-16 age group	745	0.68	3	0.72
16-30 age group	335	1.61	1	0.73

For elementary school students, the 95<sup>th</sup> percentile 8-hour breathing rates (moderate intensity activity), ED of 2.48 years (kindergarten through 6<sup>th</sup> grade, assuming 6<sup>th</sup> graders complete the academic year by June), and ASF, for the 2- to 16-year-old (years 2026-2027, and 2030-2031) age group is provided below:

<u>Age Groups</u>	<u>BR/BW (L/kg-day)</u>	<u>ED, 2.48 years</u>	<u>ASF</u>
2-16 age group	520	2.48	3

The first cumulative 2.48 years of construction was used as the exposure duration because the highest DPM emissions occur within that period of time and would result in conservative health risk estimates for students.

To calculate the overall cancer risk, the risk for each appropriate age group is calculated per the following equation:

$$\text{Cancer Risk}_{\text{AIR}} = \text{Dose}_{\text{AIR}} \times \text{CPF} \times \text{ASF} \times \text{FAH} \times \frac{\text{ED}}{\text{AT}}$$

Where:

Dose <sub>AIR</sub>	=	dose by inhalation (mg/kg-day), per age group
CPF	=	cancer potency factor, chemical-specific (mg/kg-day) <sup>-1</sup>
ASF	=	age sensitivity factor, per age group
FAH	=	fraction of time at home, per age group (for residential receptors only)
ED	=	exposure duration (years)
AT	=	averaging time period over which exposure duration is averaged (70 years)

The CPFs used in the assessment were obtained from OEHHA guidance. The excess lifetime cancer risks during the construction period to the maximally exposed resident were calculated based on the factors provided above. The cancer risks for each age group are summed to estimate the total cancer risk for each toxic chemical species. The final step converts the cancer risk in scientific notation to a whole number that expresses the cancer risk in “chances per million” by multiplying the cancer risk by a factor of 1x10<sup>6</sup> (i.e., 1 million).

The calculated results are provided in Appendix C.

## 1.5.2 Non-Carcinogenic Hazards

An evaluation was also conducted of the potential non-cancer effects of chronic chemical exposures. Adverse health effects are evaluated by comparing the annual receptor level concentration of each chemical compound with the appropriate reference exposure limit (REL). Available RELs promulgated by OEHHA were considered in the assessment.

The hazard index approach was used to quantify non-carcinogenic impacts. The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). Target organs presented in regulatory guidance were used for each discrete chemical exposure. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity value. This ratio is summed for compounds affecting the same toxicological endpoint. A health hazard is presumed to exist where the total equals or exceeds one.

The chronic hazard analysis for DPM is provided in Appendix C. The calculations contain the relevant exposure concentrations and corresponding reference dose values used in the evaluation of non-carcinogenic exposures.



## 1.6 CONSTRUCTION HRA RESULTS

The calculated results are provided in Appendix C and the results are summarized in Table 1.

TABLE 1. CONSTRUCTION RISK SUMMARY

Receptor	Cancer Risk (per million)	Chronic Hazards
Maximum Exposed Individual Resident (MEIR)	3.93	0.01
Maximum Exposed School Receptor	0.02	0.001
South Coast AQMD Threshold	10	1.0
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>

Note: Cancer risk calculated using 2015 OEHHA HRA guidance.

Cancer risk for the MEIR from project-related construction activities was calculated to be 3.93 in a million and would not exceed the 10 in a million-significance threshold. In addition, cancer risk for the maximum exposed school receptor was calculated to be 0.02 in a million and would also not exceed the 10 in a million-significance threshold. For non-carcinogenic effects, the chronic hazard index identified for each toxicological endpoint totaled less than one for all the off-site sensitive receptors. Therefore, chronic non-carcinogenic hazards are less than significant.

Therefore, the project would not expose off-site sensitive receptors to substantial concentrations of air pollutant emissions during construction and impacts would be less than significant.

## 2. References

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# Appendix A. Emission Rate Calculations

## Average Daily Emissions and Emission Rates

### Onsite Construction PM10 Exhaust Emissions<sup>1</sup>

	Year	Annual PM10 Exhaust Emissions (Tons/Year)	Annual PM10 Exhaust Emissions (lbs/Year)	# of Construction Days/Year	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/hr)	Emission Rate (g/s)	# of Total Workdays/Year	Construction Duration (Yr) <sup>2</sup>
P1	2026	0.0840	167.92	261	0.64	8.04E-02	1.01E-02	261	1.00
	2027	0.0308	61.62	139	0.44	5.54E-02	6.98E-03	261	0.53
P2	2030	0.0080	15.90	109	0.15	1.82E-02	2.30E-03	261	0.42
	2031	0.0084	16.78	137	0.12	1.53E-02	1.93E-03	261	0.52
P3	2038	0.0025	5.04	113	0.04	5.58E-03	7.02E-04	261	0.43
P4	2042	0.0023	4.50	238	0.02	2.36E-03	2.98E-04	261	0.91
P5	2049	0.0134	26.86	110	0.24	3.05E-02	3.85E-03	261	0.42
	2050	0.0049	9.76	136	0.07	8.97E-03	1.13E-03	260	0.52
				<b>1,243</b>					<b>4.76</b>

### Offsite Construction PM10 Exhaust Emissions<sup>1</sup>

	Year	Annual PM10 Exhaust Emissions (Tons/Year)	Annual PM10 Exhaust Emissions (lbs/Year)	# of Construction Days/Year	Average Daily Emissions (lbs/day)	Hauling Emissions w/in 1,000 ft (lbs/day) <sup>3</sup>	Emission Rate (lbs/hr)	Emission Rate (g/s)
P1	2026	0.0046	9.280	261	3.56E-02	4.17E-03	5.22E-04	6.58E-05
	2027	0.0021	4.3	139	3.08E-02	3.62E-03	4.52E-04	5.69E-05
P2	2030	0.0005	1.0	109	9.54E-03	1.12E-03	1.40E-04	1.76E-05
	2031	0.0004	0.9	137	6.28E-03	7.37E-04	9.21E-05	1.16E-05
P3	2038	0.0001	0.3	113	2.30E-03	7.83E-04	9.79E-05	1.23E-05
P4	2042	0.0003	0.7	238	2.86E-03	3.35E-04	4.19E-05	5.28E-06
P5	2049	0.0010	2.1	110	1.89E-02	2.22E-03	2.78E-04	3.50E-05
	2050	0.0004	0.7	136	5.44E-03	6.39E-04	7.99E-05	1.01E-05

Note: Emissions evenly distributed over 210 modeled volume sources.

	Phase 1			Phase 2			Phase 3	Phase 4			Phase 5		
	Demolition		Grading	Demolition		Grading	Vendor	Demolition	Asphalt Demolition	Grading	Building Demolition	Asphalt Demolition	Grading
Haul Length (miles)	20			20			6.9	20			20		
Number of Haul Trips	294			368			n/a	132			364		
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5								
Hauling Length (miles) <sup>3</sup>	20.00	20.00	6.90	20.00	20.00	miles							
Haul Length within 1,000 ft of Site (mile) <sup>4</sup>	2.35	2.35	2.35	2.35	2.35	miles							
Hours per work day (7:00 AM to 4:00 PM, 1-hour of breaks) <sup>5</sup>	8	8	8	8	8	hours							

<sup>1</sup> DPM emissions taken as PM<sub>10</sub> exhaust emissions from CalEEMod annual emissions.

<sup>2</sup> Construction durations determined for each year to adjust receptor exposures to the exposure durations for each construction year (see App C - Risk Calculations).

<sup>3</sup> Offsite trip length is based on the CalEEMod default vendor trip length for Phase 3. Phase 1, Phase 2, Phase 4, and Phase 5 haul lengths are the weighted average based on the haul trip distances and haul trips associated with building and asphalt demolition debris haul.

<sup>4</sup> Emissions from CalEEMod offsite average daily emissions, which is based on proportioned haul truck trip distances, are adjusted to evaluate emissions from the 2.35-mile route within 1,000 of the project site.

<sup>5</sup> Work hours applied in By Hour/Day (HRDOW) variable emissions module in air dispersion model (see App B - Air Dispersion Model Output Files).



**Annual Construction Emissions**

**Phase 1 - Asphalt Demolition**

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2026</b>					
	Fugitive Dust	0	0.0135	2.04E-03	0	2.04E-03
	Off-Road	8.53E-03	8.53E-03		7.92E-03	7.92E-03
	<b>Total</b>	<b>8.53E-03</b>	<b>2.20E-02</b>	<b>2.04E-03</b>	<b>7.92E-03</b>	<b>9.96E-03</b>
Offsite						
	Hauling	1.70E-04	2.53E-03	6.50E-04	1.60E-04	8.10E-04
	Vendor	1.00E-05	2.50E-04	7.00E-05	1.00E-05	8.00E-05
	Worker	1.00E-05	1.52E-03	4.10E-04	1.00E-05	4.10E-04
	<b>Total</b>	<b>1.90E-04</b>	<b>4.30E-03</b>	<b>1.13E-03</b>	<b>1.80E-04</b>	<b>1.30E-03</b>
<b>TOTAL</b>		<b>0.0087</b>	<b>0.0263</b>	<b>0.0032</b>	<b>0.0081</b>	<b>0.0113</b>

**Phase 1 - Site Preparation**

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2026</b>					
	Fugitive Dust	0	0.042	2.16E-02	0	2.16E-02
	Off-Road	5.43E-03	5.43E-03		5.00E-03	5.00E-03
	<b>Total</b>	<b>5.43E-03</b>	<b>4.75E-02</b>	<b>2.16E-02</b>	<b>5.00E-03</b>	<b>2.66E-02</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	1.00E-05	2.50E-04	7.00E-05	1.00E-05	8.00E-05
	Worker	0.00E+00	9.10E-04	2.40E-04	0.00E+00	2.50E-04
	<b>Total</b>	<b>1.00E-05</b>	<b>1.16E-03</b>	<b>3.10E-04</b>	<b>1.00E-05</b>	<b>3.30E-04</b>
<b>TOTAL</b>		<b>0.0054</b>	<b>0.0487</b>	<b>0.0219</b>	<b>0.0050</b>	<b>0.0269</b>

**Phase 1 - Grading**

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total		
Onsite	<b>2026</b>							
	Fugitive Dust	0	0.059	2.34E-02	0	2.34E-02		
	Off-Road	1.70E-02	1.70E-02		1.56E-02	1.56E-02	0.0494	0.0494
	<b>Total</b>	<b>1.70E-02</b>	<b>7.60E-02</b>	<b>0.0234</b>	<b>1.56E-02</b>	<b>3.90E-02</b>	0.0494	0.0494
Offsite								
	Hauling	0	0	0	0	0		
	Vendor	6.00E-05	1.48E-03	4.10E-04	6.00E-05	4.70E-04		
	Worker	1.00E-05	3.05E-03	8.10E-04	1.00E-05	8.20E-04		
	<b>Total</b>	<b>7.00E-05</b>	<b>4.53E-03</b>	<b>1.22E-03</b>	<b>7.00E-05</b>	<b>1.29E-03</b>		
<b>TOTAL</b>		<b>0.0171</b>	<b>0.0805</b>	<b>0.0246</b>	<b>0.0157</b>	<b>0.0403</b>		

**Phase 1 - Building Construction**

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2026</b>					
	Off-Road	5.30E-02	5.30E-02		4.99E-02	4.99E-02
	<b>Total</b>	<b>5.30E-02</b>	<b>5.30E-02</b>		<b>4.99E-02</b>	<b>4.99E-02</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	2.96E-03	0.0706	0.0197	2.83E-03	0.0226
	Worker	1.41E-03	0.2991	0.0796	1.30E-03	0.0809
	<b>Total</b>	<b>4.37E-03</b>	<b>0.3697</b>	<b>0.0993</b>	<b>4.13E-03</b>	<b>0.1034</b>
<b>TOTAL</b>		<b>0.0574</b>	<b>0.4227</b>	<b>0.0993</b>	<b>0.0540</b>	<b>0.1533</b>

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2027</b>					
	Off-Road	2.61E-02	2.61E-02		2.46E-02	2.46E-02
	<b>Total</b>	<b>2.61E-02</b>	<b>2.61E-02</b>		<b>2.46E-02</b>	<b>2.46E-02</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	1.45E-03	0.0348	9.72E-03	1.38E-03	0.0111
	Worker	6.50E-04	0.1473	0.0392	6.00E-04	0.0398

	Total	<b>2.10E-03</b>	<b>0.182</b>	<b>0.0489</b>	<b>1.98E-03</b>	<b>0.0509</b>
<b>TOTAL</b>		<b>0.0282</b>	<b>0.2081</b>	<b>0.0489</b>	<b>0.0266</b>	<b>0.0755</b>

<b>Phase 1 - Paving</b>						
		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite		<b>2027</b>				
	Off-Road	4.19E-03	4.19E-03		3.85E-03	3.85E-03
	Paving	0.00E+00	0.00E+00		0.00E+00	0.00E+00
	<b>Total</b>	<b>4.19E-03</b>	<b>4.19E-03</b>		<b>3.85E-03</b>	<b>3.85E-03</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	0.00E+00	0	0	0.00E+00	0
	Worker	1.00E-05	1.52E-03	4.10E-04	1.00E-05	4.10E-04
	<b>Total</b>	<b>1.00E-05</b>	<b>1.52E-03</b>	<b>4.10E-04</b>	<b>1.00E-05</b>	<b>4.10E-04</b>
<b>TOTAL</b>		<b>0.0042</b>	<b>0.0057</b>	<b>0.0004</b>	<b>0.0039</b>	<b>0.0043</b>

<b>Phase 1 - Architectural Coating</b>						
		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite		<b>2027</b>				
	Archit. Coating	0	0		0	0
	Off-Road	5.20E-04	5.20E-04		5.20E-04	5.20E-04
	<b>Total</b>	<b>5.20E-04</b>	<b>5.20E-04</b>		<b>5.20E-04</b>	<b>5.20E-04</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	0.00E+00	0	0	0.00E+00	0
	Worker	3.00E-05	5.99E-03	1.59E-03	2.00E-05	1.62E-03
	<b>Total</b>	<b>3.00E-05</b>	<b>5.99E-03</b>	<b>1.59E-03</b>	<b>2.00E-05</b>	<b>1.62E-03</b>
<b>TOTAL</b>		<b>0.0006</b>	<b>0.0065</b>	<b>0.0016</b>	<b>0.0005</b>	<b>0.0021</b>

<b>Phase 2 - Demolition</b>						
		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite		<b>2030</b>				
	Fugitive Dust	0	0.017	2.57E-03	0	2.57E-03
	Off-Road	2.15E-03	2.15E-03		2.15E-03	2.15E-03
	<b>Total</b>	<b>2.15E-03</b>	<b>1.91E-02</b>	<b>2.57E-03</b>	<b>2.15E-03</b>	<b>4.72E-03</b>
Offsite						
	Hauling	2.00E-04	3.15E-03	8.20E-04	1.90E-04	1.01E-03
	Vendor	1.00E-05	2.50E-04	7.00E-05	1.00E-05	8.00E-05
	Worker	0.00E+00	1.32E-03	3.50E-04	0.00E+00	3.60E-04
	<b>Total</b>	<b>2.10E-04</b>	<b>4.72E-03</b>	<b>1.24E-03</b>	<b>2.00E-04</b>	<b>1.45E-03</b>
<b>TOTAL</b>		<b>0.0024</b>	<b>0.0238</b>	<b>0.0038</b>	<b>0.0024</b>	<b>0.0062</b>

<b>Phase 2 - Site Preparation</b>						
		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite		<b>2030</b>				
	Fugitive Dust	0	2.68E-03	1.28E-03	0	1.28E-03
	Off-Road	1.60E-04	1.60E-04		1.60E-04	1.60E-04
	<b>Total</b>	<b>1.60E-04</b>	<b>2.84E-03</b>	<b>1.28E-03</b>	<b>1.60E-04</b>	<b>1.44E-03</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	0.00E+00	2.00E-05	1.00E-05	0.00E+00	1.00E-05
	Worker	0.00E+00	8.00E-05	2.00E-05	0.00E+00	2.00E-05
	<b>Total</b>	<b>0.00E+00</b>	<b>1.00E-04</b>	<b>3.00E-05</b>	<b>0.00E+00</b>	<b>3.00E-05</b>
<b>TOTAL</b>		<b>0.0002</b>	<b>0.0029</b>	<b>0.0013</b>	<b>0.0002</b>	<b>0.0015</b>

<b>Phase 2 - Grading</b>						
		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite		<b>2030</b>				
	Fugitive Dust	0	6.06E-03	2.93E-03	0	2.93E-03
	Off-Road	3.70E-04	3.70E-04		3.70E-04	3.70E-04
	<b>Total</b>	<b>3.70E-04</b>	<b>6.43E-03</b>	<b>2.93E-03</b>	<b>3.70E-04</b>	<b>3.30E-03</b>
Offsite						

	Hauling	0	0	0	0	0
	Vendor	0.00E+00	7.00E-05	2.00E-05	0.00E+00	2.00E-05
	Worker	0.00E+00	2.00E-04	5.00E-05	0.00E+00	5.00E-05
	Total	<b>0.00E+00</b>	<b>2.70E-04</b>	<b>7.00E-05</b>	<b>0.00E+00</b>	<b>7.00E-05</b>
<b>TOTAL</b>		<b>0.0004</b>	<b>0.0067</b>	<b>0.0030</b>	<b>0.0004</b>	<b>0.0034</b>

**Phase 2 - Building Construction**

		2030	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Off-Road		5.27E-03	5.27E-03		5.27E-03	5.27E-03
	Total		<b>5.27E-03</b>	<b>5.27E-03</b>		<b>5.27E-03</b>	<b>5.27E-03</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		2.30E-04	5.62E-03	1.57E-03	2.20E-04	1.79E-03
	Worker		8.00E-05	0.0232	6.17E-03	8.00E-05	6.24E-03
	Total		<b>3.10E-04</b>	<b>0.0288</b>	<b>7.74E-03</b>	<b>3.00E-04</b>	<b>8.03E-03</b>
<b>TOTAL</b>			<b>0.0056</b>	<b>0.0341</b>	<b>0.0077</b>	<b>0.0056</b>	<b>0.0133</b>

		2031	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Off-Road		7.43E-03	7.43E-03		7.43E-03	7.43E-03
	Total		<b>7.43E-03</b>	<b>7.43E-03</b>		<b>7.43E-03</b>	<b>7.43E-03</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		3.20E-04	7.92E-03	2.22E-03	3.00E-04	2.52E-03
	Worker		1.10E-04	0.0326	8.69E-03	1.00E-04	8.80E-03
	Total		<b>4.30E-04</b>	<b>0.0406</b>	<b>1.09E-02</b>	<b>4.00E-04</b>	<b>1.13E-02</b>
<b>TOTAL</b>			<b>0.0079</b>	<b>0.0480</b>	<b>0.0109</b>	<b>0.0078</b>	<b>0.0187</b>

**Phase 2 - Paving**

		2031	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Off-Road		8.60E-04	8.60E-04		8.60E-04	8.60E-04
	Paving		0.00E+00	0.00E+00		0.00E+00	0.00E+00
	Total		<b>8.60E-04</b>	<b>8.60E-04</b>		<b>8.60E-04</b>	<b>8.60E-04</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		0.00E+00	0	0	0.00E+00	0
	Worker		0.00E+00	6.60E-04	1.80E-04	0.00E+00	1.80E-04
	Total		<b>0.00E+00</b>	<b>6.60E-04</b>	<b>1.80E-04</b>	<b>0.00E+00</b>	<b>1.80E-04</b>
<b>TOTAL</b>			<b>0.0009</b>	<b>0.0015</b>	<b>0.0002</b>	<b>0.0009</b>	<b>0.0010</b>

**Phase 2 - Architectural Coating**

		2031	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Archit. Coating		0	0		0	0
	Off-Road		1.00E-04	1.00E-04		1.00E-04	1.00E-04
	Total		<b>1.00E-04</b>	<b>1.00E-04</b>		<b>1.00E-04</b>	<b>1.00E-04</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		0.00E+00	0	0	0.00E+00	0
	Worker		0.00E+00	5.60E-04	1.50E-04	0.00E+00	1.50E-04
	Total		<b>0.00E+00</b>	<b>5.60E-04</b>	<b>1.50E-04</b>	<b>0.00E+00</b>	<b>1.50E-04</b>
<b>TOTAL</b>			<b>0.0001</b>	<b>0.0007</b>	<b>0.0002</b>	<b>0.0001</b>	<b>0.0003</b>

**Phase 3 - Site Preparation**

		2038	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Fugitive Dust		0	1.10E-04	1.00E-05	0	1.00E-05
	Off-Road		2.00E-05	2.00E-05		2.00E-05	2.00E-05
	Total		<b>2.00E-05</b>	<b>1.30E-04</b>	<b>1.00E-05</b>	<b>2.00E-05</b>	<b>3.00E-05</b>
Offsite							

Hauling	0	0	0	0	0
Vendor	0.00E+00	1.00E-05	0	0.00E+00	0
Worker	0.00E+00	3.00E-05	1.00E-05	0.00E+00	1.00E-05
Total	<b>0.00E+00</b>	<b>4.00E-05</b>	<b>1.00E-05</b>	<b>0.00E+00</b>	<b>1.00E-05</b>
<b>TOTAL</b>	<b>0.0000</b>	<b>0.0002</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

### Phase 3 - Grading

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2038</b>					
	Fugitive Dust	0	2.27E-03	1.10E-03	0	1.10E-03
	Off-Road	9.00E-05	9.00E-05		9.00E-05	9.00E-05
	Total	<b>9.00E-05</b>	<b>2.36E-03</b>	<b>1.10E-03</b>	<b>9.00E-05</b>	<b>1.19E-03</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	0.00E+00	2.00E-05	1.00E-05	0.00E+00	1.00E-05
	Worker	0.00E+00	8.00E-05	2.00E-05	0.00E+00	2.00E-05
	Total	<b>0.00E+00</b>	<b>1.00E-04</b>	<b>3.00E-05</b>	<b>0.00E+00</b>	<b>3.00E-05</b>
<b>TOTAL</b>		<b>0.0001</b>	<b>0.0025</b>	<b>0.0011</b>	<b>0.0001</b>	<b>0.0012</b>

### Phase 3 - Building Construction

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2038</b>					
	Off-Road	2.12E-03	2.12E-03		2.12E-03	2.12E-03
	Total	<b>2.12E-03</b>	<b>2.12E-03</b>		<b>2.12E-03</b>	<b>2.12E-03</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	1.00E-04	2.46E-03	6.90E-04	9.00E-05	7.80E-04
	Worker	3.00E-05	0.0106	2.84E-03	3.00E-05	2.86E-03
	Total	<b>1.30E-04</b>	<b>0.0131</b>	<b>3.53E-03</b>	<b>1.20E-04</b>	<b>3.64E-03</b>
<b>TOTAL</b>		<b>0.0023</b>	<b>0.0152</b>	<b>0.0035</b>	<b>0.0022</b>	<b>0.0058</b>

### Phase 3 - Paving

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2038</b>					
	Off-Road	2.70E-04	2.70E-04		2.70E-04	2.70E-04
	Paving	0.00E+00	0.00E+00		0.00E+00	0.00E+00
	Total	<b>2.70E-04</b>	<b>2.70E-04</b>		<b>2.70E-04</b>	<b>2.70E-04</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	0.00E+00	0	0	0.00E+00	0
	Worker	0.00E+00	4.60E-04	1.20E-04	0.00E+00	1.20E-04
	Total	<b>0.00E+00</b>	<b>4.60E-04</b>	<b>1.20E-04</b>	<b>0.00E+00</b>	<b>1.20E-04</b>
<b>TOTAL</b>		<b>0.0003</b>	<b>0.0007</b>	<b>0.0001</b>	<b>0.0003</b>	<b>0.0004</b>

### Phase 3 - Architectural Coating

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2038</b>					
	Archit. Coating	0.00E+00	0.00E+00		0.00E+00	0.00E+00
	Off-Road	2.00E-05	2.00E-05		2.00E-05	2.00E-05
	Total	<b>2.00E-05</b>	<b>2.00E-05</b>		<b>2.00E-05</b>	<b>2.00E-05</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	0	0	0	0	0
	Worker	0.00E+00	1.00E-04	3.00E-05	0.00E+00	3.00E-05
	Total	<b>0.00E+00</b>	<b>1.00E-04</b>	<b>3.00E-05</b>	<b>0.00E+00</b>	<b>3.00E-05</b>
<b>TOTAL</b>		<b>0.0000</b>	<b>0.0001</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0001</b>

### Phase 4 - Demolition

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2042</b>					
	Fugitive Dust	0.00E+00	6.07E-03	9.20E-04	0.00E+00	9.20E-04
	Off-Road	1.80E-04	1.80E-04		1.80E-04	1.80E-04

Offsite	Total		<b>1.80E-04</b>	<b>6.25E-03</b>	<b>9.20E-04</b>	<b>1.80E-04</b>	<b>1.10E-03</b>
	Hauling		7.00E-05	1.13E-03	2.90E-04	7.00E-05	3.60E-04
	Vendor		0	1.20E-04	3.00E-05	0	4.00E-05
	Worker		0.00E+00	5.10E-04	1.40E-04	0.00E+00	1.40E-04
	Total		<b>7.00E-05</b>	<b>1.76E-03</b>	<b>4.60E-04</b>	<b>7.00E-05</b>	<b>5.40E-04</b>
<b>TOTAL</b>			<b>0.0003</b>	<b>0.0080</b>	<b>0.0014</b>	<b>0.0003</b>	<b>0.0016</b>

#### Phase 4 - Site Preparation

		2042	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Fugitive Dust		0	1.10E-04	1.00E-05	0	1.00E-05
	Off-Road		1.00E-05	1.00E-05		1.00E-05	1.00E-05
	Total		<b>1.00E-05</b>	<b>1.20E-04</b>	<b>1.00E-05</b>	<b>1.00E-05</b>	<b>2.00E-05</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		0.00E+00	1.00E-05	0	0.00E+00	0
	Worker		0.00E+00	3.00E-05	1.00E-05	0.00E+00	1.00E-05
	Total		<b>0.00E+00</b>	<b>4.00E-05</b>	<b>1.00E-05</b>	<b>0.00E+00</b>	<b>1.00E-05</b>
<b>TOTAL</b>			<b>0.0000</b>	<b>0.0002</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Phase 4 - Grading

		2042	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Fugitive Dust		0	2.27E-03	1.10E-03	0	1.10E-03
	Off-Road		6.00E-05	6.00E-05		6.00E-05	6.00E-05
	Total		<b>6.00E-05</b>	<b>2.33E-03</b>	<b>1.10E-03</b>	<b>6.00E-05</b>	<b>1.16E-03</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		0.00E+00	2.00E-05	1.00E-05	0.00E+00	1.00E-05
	Worker		0.00E+00	8.00E-05	2.00E-05	0.00E+00	2.00E-05
	Total		<b>0.00E+00</b>	<b>1.00E-04</b>	<b>3.00E-05</b>	<b>0.00E+00</b>	<b>3.00E-05</b>
<b>TOTAL</b>			<b>0.0001</b>	<b>0.0024</b>	<b>0.0011</b>	<b>0.0001</b>	<b>0.0012</b>

#### Phase 4 - Building Construction

		2042	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Off-Road		1.77E-03	1.77E-03		1.77E-03	1.77E-03
	Total		<b>1.77E-03</b>	<b>1.77E-03</b>		<b>1.77E-03</b>	<b>1.77E-03</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		2.20E-04	5.53E-03	1.55E-03	2.10E-04	1.76E-03
	Worker		5.00E-05	0.0233	6.21E-03	5.00E-05	6.26E-03
	Total		<b>2.70E-04</b>	<b>0.0288</b>	<b>7.76E-03</b>	<b>2.60E-04</b>	<b>8.02E-03</b>
<b>TOTAL</b>			<b>0.0020</b>	<b>0.0306</b>	<b>0.0078</b>	<b>0.0020</b>	<b>0.0098</b>

#### Phase 4 - Paving

		2042	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Off-Road		2.10E-04	2.10E-04		2.10E-04	2.10E-04
	Paving		0.00E+00	0.00E+00		0.00E+00	0.00E+00
	Total		<b>2.10E-04</b>	<b>2.10E-04</b>		<b>2.10E-04</b>	<b>2.10E-04</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		0.00E+00	0	0	0.00E+00	0
	Worker		0.00E+00	4.60E-04	1.20E-04	0.00E+00	1.20E-04
	Total		<b>0.00E+00</b>	<b>4.60E-04</b>	<b>1.20E-04</b>	<b>0.00E+00</b>	<b>1.20E-04</b>
<b>TOTAL</b>			<b>0.0002</b>	<b>0.0007</b>	<b>0.0001</b>	<b>0.0002</b>	<b>0.0003</b>

#### Phase 4 - Architectural Coating

		2042	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Archit. Coating		0.00E+00	0.00E+00		0.00E+00	0.00E+00
	Off-Road		2.00E-05	2.00E-05		2.00E-05	2.00E-05

Offsite	Total	<b>2.00E-05</b>	<b>2.00E-05</b>	<b>2.00E-05</b>	<b>2.00E-05</b>
	Hauling	0	0	0	0
	Vendor	0.00E+00	0	0	0.00E+00
	Worker	0.00E+00	2.30E-04	6.00E-05	0.00E+00
	Total	<b>0.00E+00</b>	<b>2.30E-04</b>	<b>6.00E-05</b>	<b>0.00E+00</b>
<b>TOTAL</b>		<b>0.0000</b>	<b>0.0003</b>	<b>0.0001</b>	<b>0.0000</b>

#### Phase 5 - Demolition

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2049</b>					
	Fugitive Dust	0.00E+00	1.68E-02	0.00254	0.00E+00	2.54E-03
	Off-Road	1.63E-03	1.63E-03		1.63E-03	1.63E-03
	Total	<b>1.63E-03</b>	<b>1.84E-02</b>	<b>0.00254</b>	<b>1.63E-03</b>	<b>4.17E-03</b>
Offsite						
	Hauling	0.00019	0.00311	0.00081	0.00018	0.00099
	Vendor	1.00E-05	2.50E-04	7.00E-05	1.00E-05	8.00E-05
	Worker	0.00E+00	0.00152	4.10E-04	0.00E+00	4.10E-04
	Total	<b>2.00E-04</b>	<b>0.00488</b>	<b>0.00129</b>	<b>1.90E-04</b>	<b>0.00148</b>
<b>TOTAL</b>		<b>0.0018</b>	<b>0.0233</b>	<b>0.0038</b>	<b>0.0018</b>	<b>0.0057</b>

#### Phase 5 - Site Preparation

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2049</b>					
	Fugitive Dust	0.00E+00	4.20E-02	0.0216	0.00E+00	2.16E-02
	Off-Road	1.01E-03	1.01E-03		1.01E-03	1.01E-03
	Total	<b>1.01E-03</b>	<b>4.30E-02</b>	<b>0.0216</b>	<b>1.01E-03</b>	<b>2.26E-02</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	1.00E-05	2.50E-04	7.00E-05	1.00E-05	8.00E-05
	Worker	0.00E+00	0.00091	2.40E-04	0.00E+00	2.40E-04
	Total	<b>1.00E-05</b>	<b>0.00116</b>	<b>0.00031</b>	<b>1.00E-05</b>	<b>0.00032</b>
<b>TOTAL</b>		<b>0.0010</b>	<b>0.0442</b>	<b>0.0219</b>	<b>0.0010</b>	<b>0.0229</b>

#### Phase 5 - Grading

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2049</b>					
	Fugitive Dust	0.00E+00	5.90E-02	0.0234	0.00E+00	2.34E-02
	Off-Road	3.38E-03	3.38E-03		3.38E-03	3.38E-03
	Total	<b>3.38E-03</b>	<b>6.24E-02</b>	<b>0.0234</b>	<b>3.38E-03</b>	<b>2.68E-02</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	6.00E-05	1.47E-03	4.10E-04	6.00E-05	4.70E-04
	Worker	1.00E-05	0.00304	8.10E-04	1.00E-05	8.20E-04
	Total	<b>7.00E-05</b>	<b>0.00451</b>	<b>0.00122</b>	<b>7.00E-05</b>	<b>0.00129</b>
<b>TOTAL</b>		<b>0.0035</b>	<b>0.0669</b>	<b>0.0246</b>	<b>0.0035</b>	<b>0.0281</b>

#### Phase 5 - Building Construction

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2049</b>					
	Off-Road	7.41E-03	7.41E-03		7.41E-03	7.41E-03
	Total	<b>7.41E-03</b>	<b>7.41E-03</b>		<b>7.41E-03</b>	<b>7.41E-03</b>
Offsite						
	Hauling	0	0	0	0	0
	Vendor	6.30E-04	1.61E-02	4.50E-03	6.00E-04	5.10E-03
	Worker	1.30E-04	0.0682	1.82E-02	1.20E-04	1.83E-02
	Total	<b>7.60E-04</b>	<b>0.0843</b>	<b>0.0227</b>	<b>7.20E-04</b>	<b>0.0234</b>
<b>TOTAL</b>		<b>0.0082</b>	<b>0.0917</b>	<b>0.0227</b>	<b>0.0081</b>	<b>0.0308</b>

		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	<b>2050</b>					
	Off-Road	3.65E-03	3.65E-03		3.65E-03	3.65E-03

Offsite	Total	<b>3.65E-03</b>	<b>3.65E-03</b>		<b>3.65E-03</b>	<b>3.65E-03</b>
	Hauling	0	0	0	0	0
	Vendor	3.10E-04	7.91E-03	2.22E-03	3.00E-04	2.51E-03
	Worker	6.00E-05	0.0336	8.96E-03	5.00E-05	9.02E-03
	Total	<b>3.70E-04</b>	<b>0.0415</b>	<b>0.0112</b>	<b>3.50E-04</b>	<b>0.0115</b>
<b>TOTAL</b>		<b>0.0040</b>	<b>0.0452</b>	<b>0.0112</b>	<b>0.0040</b>	<b>0.0152</b>

**Phase 5 - Paving**

		2050	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Off-Road		1.16E-03	1.16E-03		1.16E-03	1.16E-03
	Paving		0.00E+00	0.00E+00		0.00E+00	0.00E+00
	Total		<b>1.16E-03</b>	<b>1.16E-03</b>		<b>1.16E-03</b>	<b>1.16E-03</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		0.00E+00	0	0	0.00E+00	0
	Worker		0.00E+00	1.52E-03	4.10E-04	0.00E+00	4.10E-04
	Total		<b>0.00E+00</b>	<b>1.52E-03</b>	<b>4.10E-04</b>	<b>0.00E+00</b>	<b>4.10E-04</b>
<b>TOTAL</b>			<b>0.0012</b>	<b>0.0027</b>	<b>0.0004</b>	<b>0.0012</b>	<b>0.0016</b>

**Phase 5 - Architectural Coating**

		2050	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	Archit. Coating		0	0		0	0
	Off-Road		7.00E-05	7.00E-05		7.00E-05	7.00E-05
	Total		<b>7.00E-05</b>	<b>7.00E-05</b>		<b>7.00E-05</b>	<b>7.00E-05</b>
Offsite	Hauling		0	0	0	0	0
	Vendor		0.00E+00	0	0	0.00E+00	0
	Worker		0.00E+00	1.32E-03	3.50E-04	0.00E+00	3.50E-04
	Total		<b>0.00E+00</b>	<b>1.32E-03</b>	<b>3.50E-04</b>	<b>0.00E+00</b>	<b>3.50E-04</b>
<b>TOTAL</b>			<b>0.0001</b>	<b>0.0014</b>	<b>0.0004</b>	<b>0.0001</b>	<b>0.0004</b>

# Appendix B. Air Dispersion Model Output





## Model Output - Residential Receptors Unit Emission Rates (1 g/s)

\*\*Model Set To Continue RUNNING After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 16216

\*\*Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 379.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 4.4 MB of RAM.

\*\*Input Runstream File: aermod.inp

\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: CCCD-01.err

\*\*File for Summary of Results: CCCD-01.sum

# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*      \*\*\* Construction HRA  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\* Rancho Cucamonga Campus

\*\*\* 01/19/22  
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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000329	0	0.47326E-02	448274.8	3778998.9	543.1	4.15	8.37	1.93	YES	HRDOW
L0000330	0	0.47326E-02	448256.8	3778998.7	543.5	4.15	8.37	1.93	YES	HRDOW
L0000331	0	0.47326E-02	448238.8	3778998.5	544.1	4.15	8.37	1.93	YES	HRDOW
L0000332	0	0.47326E-02	448220.8	3778998.3	544.1	4.15	8.37	1.93	YES	HRDOW
L0000333	0	0.47326E-02	448202.8	3778998.2	544.3	4.15	8.37	1.93	YES	HRDOW
L0000334	0	0.47326E-02	448184.8	3778998.0	544.9	4.15	8.37	1.93	YES	HRDOW
L0000335	0	0.47326E-02	448166.8	3778997.8	545.0	4.15	8.37	1.93	YES	HRDOW
L0000336	0	0.47326E-02	448148.8	3778997.6	545.1	4.15	8.37	1.93	YES	HRDOW
L0000337	0	0.47326E-02	448130.8	3778997.4	545.7	4.15	8.37	1.93	YES	HRDOW
L0000338	0	0.47326E-02	448112.8	3778997.3	546.2	4.15	8.37	1.93	YES	HRDOW
L0000339	0	0.47326E-02	448094.8	3778997.1	546.8	4.15	8.37	1.93	YES	HRDOW
L0000340	0	0.47326E-02	448076.8	3778996.9	547.4	4.15	8.37	1.93	YES	HRDOW
L0000341	0	0.47326E-02	448058.8	3778996.7	548.0	4.15	8.37	1.93	YES	HRDOW
L0000342	0	0.47326E-02	448040.8	3778996.5	548.6	4.15	8.37	1.93	YES	HRDOW
L0000343	0	0.47326E-02	448022.8	3778996.3	549.2	4.15	8.37	1.93	YES	HRDOW
L0000344	0	0.47326E-02	448004.8	3778996.2	549.8	4.15	8.37	1.93	YES	HRDOW
L0000345	0	0.47326E-02	447986.8	3778996.0	549.9	4.15	8.37	1.93	YES	HRDOW
L0000346	0	0.47326E-02	447968.8	3778995.8	549.9	4.15	8.37	1.93	YES	HRDOW
L0000347	0	0.47326E-02	447950.8	3778995.6	549.3	4.15	8.37	1.93	YES	HRDOW
L0000348	0	0.47326E-02	447932.8	3778995.4	549.1	4.15	8.37	1.93	YES	HRDOW
L0000349	0	0.47326E-02	447914.8	3778995.3	549.7	4.15	8.37	1.93	YES	HRDOW
L0000350	0	0.47326E-02	447896.8	3778995.1	549.9	4.15	8.37	1.93	YES	HRDOW
L0000351	0	0.47326E-02	447878.8	3778994.9	549.9	4.15	8.37	1.93	YES	HRDOW
L0000352	0	0.47326E-02	447860.8	3778994.7	549.9	4.15	8.37	1.93	YES	HRDOW
L0000353	0	0.47326E-02	447842.8	3778994.5	550.1	4.15	8.37	1.93	YES	HRDOW
L0000354	0	0.47326E-02	447824.8	3778994.3	550.7	4.15	8.37	1.93	YES	HRDOW
L0000355	0	0.47326E-02	447806.8	3778994.2	550.8	4.15	8.37	1.93	YES	HRDOW
L0000356	0	0.47326E-02	447788.8	3778994.0	550.8	4.15	8.37	1.93	YES	HRDOW
L0000357	0	0.47326E-02	447770.8	3778993.8	550.7	4.15	8.37	1.93	YES	HRDOW
L0000358	0	0.47326E-02	447752.8	3778993.6	550.7	4.15	8.37	1.93	YES	HRDOW
L0000359	0	0.47326E-02	447734.8	3778993.4	550.8	4.15	8.37	1.93	YES	HRDOW
L0000360	0	0.47326E-02	447716.8	3778993.3	551.2	4.15	8.37	1.93	YES	HRDOW
L0000361	0	0.47326E-02	447698.8	3778993.1	551.8	4.15	8.37	1.93	YES	HRDOW
L0000362	0	0.47326E-02	447680.8	3778992.9	552.4	4.15	8.37	1.93	YES	HRDOW
L0000363	0	0.47326E-02	447662.8	3778992.7	552.7	4.15	8.37	1.93	YES	HRDOW
L0000364	0	0.47326E-02	447644.8	3778992.5	552.7	4.15	8.37	1.93	YES	HRDOW
L0000365	0	0.47326E-02	447626.8	3778992.3	552.7	4.15	8.37	1.93	YES	HRDOW
L0000366	0	0.47326E-02	447608.8	3778992.2	552.7	4.15	8.37	1.93	YES	HRDOW

## Model Output - Residential Receptors Unit Emission Rates (1 g/s)

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L0000367      0  0.47326E-02  447590.8 3778992.0  552.7   4.15   8.37   1.93   YES  HRDOW
L0000368      0  0.47326E-02  447572.8 3778991.8  552.7   4.15   8.37   1.93   YES  HRDOW
*** AERMOD - VERSION 21112 ***   *** Construction HRA
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus
  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

### \*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000369	0	0.47326E-02	447554.8	3778991.6	552.7	4.15	8.37	1.93	YES	HRDOW
L0000370	0	0.47326E-02	447536.8	3778991.4	553.1	4.15	8.37	1.93	YES	HRDOW
L0000371	0	0.47326E-02	447518.9	3778991.3	553.6	4.15	8.37	1.93	YES	HRDOW
L0000372	0	0.47326E-02	447500.9	3778991.1	553.6	4.15	8.37	1.93	YES	HRDOW
L0000373	0	0.47326E-02	447482.9	3778991.1	553.6	4.15	8.37	1.93	YES	HRDOW
L0000374	0	0.47326E-02	447464.9	3778991.4	553.6	4.15	8.37	1.93	YES	HRDOW
L0000375	0	0.47326E-02	447446.9	3778991.7	553.7	4.15	8.37	1.93	YES	HRDOW
L0000376	0	0.47326E-02	447428.9	3778992.0	553.7	4.15	8.37	1.93	YES	HRDOW
L0000377	0	0.47326E-02	447410.9	3778992.3	553.7	4.15	8.37	1.93	YES	HRDOW
L0000378	0	0.47326E-02	447392.9	3778992.6	553.7	4.15	8.37	1.93	YES	HRDOW
L0000379	0	0.47326E-02	447374.9	3778992.9	553.7	4.15	8.37	1.93	YES	HRDOW
L0000380	0	0.47326E-02	447356.9	3778993.2	553.8	4.15	8.37	1.93	YES	HRDOW
L0000381	0	0.47326E-02	447338.9	3778993.5	553.8	4.15	8.37	1.93	YES	HRDOW
L0000382	0	0.47326E-02	447320.9	3778993.8	553.8	4.15	8.37	1.93	YES	HRDOW
L0000383	0	0.47326E-02	447302.9	3778994.1	553.8	4.15	8.37	1.93	YES	HRDOW
L0000384	0	0.47326E-02	447284.9	3778994.4	553.8	4.15	8.37	1.93	YES	HRDOW
L0000385	0	0.47326E-02	447266.9	3778994.6	553.8	4.15	8.37	1.93	YES	HRDOW
L0000386	0	0.47326E-02	447248.9	3778994.9	553.8	4.15	8.37	1.93	YES	HRDOW
L0000387	0	0.47326E-02	447230.9	3778995.2	553.8	4.15	8.37	1.93	YES	HRDOW
L0000388	0	0.47326E-02	447212.9	3778995.5	553.9	4.15	8.37	1.93	YES	HRDOW
L0000389	0	0.47326E-02	447194.9	3778995.8	553.9	4.15	8.37	1.93	YES	HRDOW
L0000390	0	0.47326E-02	447176.9	3778996.1	554.0	4.15	8.37	1.93	YES	HRDOW
L0000391	0	0.47326E-02	447158.9	3778996.4	554.0	4.15	8.37	1.93	YES	HRDOW
L0000392	0	0.47326E-02	447140.9	3778996.7	554.0	4.15	8.37	1.93	YES	HRDOW
L0000393	0	0.47326E-02	447122.9	3778997.0	554.0	4.15	8.37	1.93	YES	HRDOW
L0000394	0	0.47326E-02	447104.9	3778997.3	554.0	4.15	8.37	1.93	YES	HRDOW
L0000395	0	0.47326E-02	447086.9	3778997.6	554.0	4.15	8.37	1.93	YES	HRDOW
L0000396	0	0.47326E-02	447068.9	3778997.9	554.1	4.15	8.37	1.93	YES	HRDOW
L0000397	0	0.47326E-02	447050.9	3778998.1	554.1	4.15	8.37	1.93	YES	HRDOW
L0000398	0	0.47326E-02	447032.9	3778998.4	554.3	4.15	8.37	1.93	YES	HRDOW
L0000399	0	0.47326E-02	447014.9	3778998.7	554.9	4.15	8.37	1.93	YES	HRDOW
L0000400	0	0.47326E-02	446996.9	3778999.0	555.1	4.15	8.37	1.93	YES	HRDOW
L0000401	0	0.47326E-02	446978.9	3778999.3	555.2	4.15	8.37	1.93	YES	HRDOW
L0000402	0	0.47326E-02	446960.9	3778999.6	555.2	4.15	8.37	1.93	YES	HRDOW
L0000403	0	0.47326E-02	446942.9	3778999.9	555.4	4.15	8.37	1.93	YES	HRDOW
L0000404	0	0.76071E-02	446928.3	3779189.2	570.2	4.15	13.49	1.93	YES	HRDOW

## Model Output - Residential Receptors Unit Emission Rates (1 g/s)

L0000405	0	0.76071E-02	446927.9	3779160.2	567.7	4.15	13.49	1.93	YES	HRDOW
L0000406	0	0.76071E-02	446927.4	3779131.2	565.3	4.15	13.49	1.93	YES	HRDOW
L0000407	0	0.76071E-02	446927.0	3779102.2	562.9	4.15	13.49	1.93	YES	HRDOW
L0000408	0	0.76071E-02	446926.5	3779073.2	561.0	4.15	13.49	1.93	YES	HRDOW

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000409	0	0.76071E-02	446926.1	3779044.2	559.1	4.15	13.49	1.93	YES	HRDOW
L0000410	0	0.76071E-02	446925.6	3779015.2	557.0	4.15	13.49	1.93	YES	HRDOW
L0000411	0	0.76071E-02	446925.2	3778986.2	554.8	4.15	13.49	1.93	YES	HRDOW
L0000412	0	0.76071E-02	446924.8	3778957.2	552.6	4.15	13.49	1.93	YES	HRDOW
L0000413	0	0.76071E-02	446924.3	3778928.2	551.3	4.15	13.49	1.93	YES	HRDOW
L0000414	0	0.76071E-02	446923.9	3778899.2	549.2	4.15	13.49	1.93	YES	HRDOW
L0000415	0	0.76071E-02	446923.4	3778870.2	546.3	4.15	13.49	1.93	YES	HRDOW
L0000416	0	0.76071E-02	446923.0	3778841.2	543.4	4.15	13.49	1.93	YES	HRDOW
L0000417	0	0.76071E-02	446922.5	3778812.2	540.7	4.15	13.49	1.93	YES	HRDOW
L0000418	0	0.76071E-02	446922.1	3778783.2	538.8	4.15	13.49	1.93	YES	HRDOW
L0000419	0	0.76071E-02	446921.6	3778754.2	536.7	4.15	13.49	1.93	YES	HRDOW
L0000420	0	0.76071E-02	446921.2	3778725.2	533.9	4.15	13.49	1.93	YES	HRDOW
L0000421	0	0.76071E-02	446920.7	3778696.2	532.0	4.15	13.49	1.93	YES	HRDOW
L0000422	0	0.76071E-02	446920.3	3778667.2	530.0	4.15	13.49	1.93	YES	HRDOW
L0000423	0	0.76071E-02	446919.8	3778638.2	528.1	4.15	13.49	1.93	YES	HRDOW
L0000424	0	0.76071E-02	446919.4	3778609.2	526.2	4.15	13.49	1.93	YES	HRDOW
L0000425	0	0.76071E-02	446919.0	3778580.2	524.2	4.15	13.49	1.93	YES	HRDOW
L0000426	0	0.76071E-02	446918.5	3778551.2	521.4	4.15	13.49	1.93	YES	HRDOW
L0000427	0	0.76071E-02	446918.1	3778522.2	519.4	4.15	13.49	1.93	YES	HRDOW
L0000428	0	0.76071E-02	446917.6	3778493.2	517.4	4.15	13.49	1.93	YES	HRDOW
L0000429	0	0.76071E-02	446917.2	3778464.2	515.4	4.15	13.49	1.93	YES	HRDOW
L0000430	0	0.76071E-02	446916.7	3778435.2	513.5	4.15	13.49	1.93	YES	HRDOW
L0000431	0	0.76071E-02	446916.3	3778406.3	511.6	4.15	13.49	1.93	YES	HRDOW
L0000432	0	0.76071E-02	446915.8	3778377.3	509.7	4.15	13.49	1.93	YES	HRDOW
L0000433	0	0.76071E-02	446915.4	3778348.3	507.8	4.15	13.49	1.93	YES	HRDOW
L0000434	0	0.76071E-02	446914.9	3778319.3	505.4	4.15	13.49	1.93	YES	HRDOW
L0000435	0	0.76071E-02	446914.5	3778290.3	503.3	4.15	13.49	1.93	YES	HRDOW
L0000436	0	0.76071E-02	446914.0	3778261.3	501.6	4.15	13.49	1.93	YES	HRDOW
L0000437	0	0.76071E-02	446913.6	3778232.3	500.0	4.15	13.49	1.93	YES	HRDOW
L0000438	0	0.76071E-02	446913.2	3778203.3	498.2	4.15	13.49	1.93	YES	HRDOW
L0000439	0	0.76071E-02	446912.7	3778174.3	496.3	4.15	13.49	1.93	YES	HRDOW
L0000440	0	0.76071E-02	446912.3	3778145.3	494.4	4.15	13.49	1.93	YES	HRDOW
L0000441	0	0.76071E-02	446911.8	3778116.3	492.3	4.15	13.49	1.93	YES	HRDOW
L0000442	0	0.76071E-02	446911.4	3778087.3	490.4	4.15	13.49	1.93	YES	HRDOW

## Model Output - Residential Receptors Unit Emission Rates (1 g/s)

L0000443	0	0.76071E-02	446910.9	3778058.3	488.4	4.15	13.49	1.93	YES	HRDOW
L0000444	0	0.76071E-02	446910.5	3778029.3	486.5	4.15	13.49	1.93	YES	HRDOW
L0000445	0	0.76071E-02	446910.0	3778000.3	484.6	4.15	13.49	1.93	YES	HRDOW
L0000446	0	0.76071E-02	446909.6	3777971.3	482.6	4.15	13.49	1.93	YES	HRDOW
L0000447	0	0.34560E-02	448108.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW
L0000448	0	0.34560E-02	448095.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

### \*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000449	0	0.34560E-02	448082.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW
L0000450	0	0.34560E-02	448069.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW
L0000451	0	0.34560E-02	448056.3	3778200.0	495.8	4.15	6.05	1.93	YES	HRDOW
L0000452	0	0.34560E-02	448043.3	3778200.0	495.7	4.15	6.05	1.93	YES	HRDOW
L0000453	0	0.34560E-02	448030.3	3778200.0	495.5	4.15	6.05	1.93	YES	HRDOW
L0000454	0	0.34560E-02	448017.3	3778200.0	495.2	4.15	6.05	1.93	YES	HRDOW
L0000455	0	0.34560E-02	448004.3	3778200.0	495.0	4.15	6.05	1.93	YES	HRDOW
L0000456	0	0.34560E-02	447991.3	3778200.0	494.9	4.15	6.05	1.93	YES	HRDOW
L0000457	0	0.34560E-02	447978.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000458	0	0.34560E-02	447965.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000459	0	0.34560E-02	447952.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000460	0	0.34560E-02	447939.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000461	0	0.34560E-02	447926.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000462	0	0.34560E-02	447913.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000463	0	0.34560E-02	447900.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000464	0	0.34560E-02	447887.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000465	0	0.34560E-02	447874.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000466	0	0.34560E-02	447861.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000467	0	0.34560E-02	447848.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000468	0	0.34560E-02	447835.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000469	0	0.34560E-02	447822.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000470	0	0.34560E-02	447809.3	3778199.9	495.1	4.15	6.05	1.93	YES	HRDOW
L0000471	0	0.34560E-02	447796.3	3778199.9	495.3	4.15	6.05	1.93	YES	HRDOW
L0000472	0	0.34560E-02	447783.3	3778199.9	495.5	4.15	6.05	1.93	YES	HRDOW
L0000473	0	0.34560E-02	447770.3	3778199.9	495.7	4.15	6.05	1.93	YES	HRDOW
L0000474	0	0.34560E-02	447757.3	3778199.9	495.9	4.15	6.05	1.93	YES	HRDOW
L0000475	0	0.34560E-02	447744.3	3778199.9	496.2	4.15	6.05	1.93	YES	HRDOW
L0000476	0	0.34560E-02	447731.3	3778199.9	496.4	4.15	6.05	1.93	YES	HRDOW
L0000477	0	0.34560E-02	447718.3	3778199.9	496.6	4.15	6.05	1.93	YES	HRDOW
L0000478	0	0.34560E-02	447705.3	3778199.9	496.8	4.15	6.05	1.93	YES	HRDOW
L0000479	0	0.34560E-02	447692.4	3778200.5	496.9	4.15	6.05	1.93	YES	HRDOW
L0000480	0	0.34560E-02	447679.4	3778201.7	497.0	4.15	6.05	1.93	YES	HRDOW

**Model Output - Residential Receptors  
Unit Emission Rates (1 g/s)**

L0000481	0	0.34560E-02	447666.5	3778202.9	497.1	4.15	6.05	1.93	YES	HRDOW
L0000482	0	0.34560E-02	447653.5	3778204.2	497.2	4.15	6.05	1.93	YES	HRDOW
L0000483	0	0.34560E-02	447640.6	3778205.4	497.2	4.15	6.05	1.93	YES	HRDOW
L0000484	0	0.34560E-02	447627.7	3778206.6	497.3	4.15	6.05	1.93	YES	HRDOW
L0000485	0	0.34560E-02	447614.7	3778207.8	497.4	4.15	6.05	1.93	YES	HRDOW
L0000486	0	0.34560E-02	447601.8	3778209.0	497.6	4.15	6.05	1.93	YES	HRDOW
L0000487	0	0.34560E-02	447588.8	3778210.3	497.7	4.15	6.05	1.93	YES	HRDOW
L0000488	0	0.34560E-02	447575.9	3778211.2	497.9	4.15	6.05	1.93	YES	HRDOW

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000489	0	0.34560E-02	447562.9	3778211.2	498.3	4.15	6.05	1.93	YES	HRDOW
L0000490	0	0.34560E-02	447549.9	3778211.2	498.6	4.15	6.05	1.93	YES	HRDOW
L0000491	0	0.34560E-02	447536.9	3778211.1	499.0	4.15	6.05	1.93	YES	HRDOW
L0000492	0	0.34560E-02	447523.9	3778211.1	499.5	4.15	6.05	1.93	YES	HRDOW
L0000493	0	0.34560E-02	447510.9	3778211.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000494	0	0.34560E-02	447497.9	3778211.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000495	0	0.34560E-02	447484.9	3778211.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000496	0	0.34560E-02	447471.9	3778210.9	499.6	4.15	6.05	1.93	YES	HRDOW
L0000497	0	0.34560E-02	447458.9	3778210.9	499.6	4.15	6.05	1.93	YES	HRDOW
L0000498	0	0.34560E-02	447445.9	3778210.8	499.2	4.15	6.05	1.93	YES	HRDOW
L0000499	0	0.34560E-02	447432.9	3778210.8	498.9	4.15	6.05	1.93	YES	HRDOW
L0000500	0	0.34560E-02	447419.9	3778210.8	498.7	4.15	6.05	1.93	YES	HRDOW
L0000501	0	0.34560E-02	447406.9	3778210.7	498.7	4.15	6.05	1.93	YES	HRDOW
L0000502	0	0.34560E-02	447393.9	3778210.7	498.6	4.15	6.05	1.93	YES	HRDOW
L0000503	0	0.34560E-02	447380.9	3778210.6	498.7	4.15	6.05	1.93	YES	HRDOW
L0000504	0	0.34560E-02	447367.9	3778210.6	498.8	4.15	6.05	1.93	YES	HRDOW
L0000505	0	0.34560E-02	447354.9	3778210.6	498.8	4.15	6.05	1.93	YES	HRDOW
L0000506	0	0.34560E-02	447341.9	3778210.5	498.8	4.15	6.05	1.93	YES	HRDOW
L0000507	0	0.34560E-02	447328.9	3778210.5	498.8	4.15	6.05	1.93	YES	HRDOW
L0000508	0	0.34560E-02	447315.9	3778210.5	498.8	4.15	6.05	1.93	YES	HRDOW
L0000509	0	0.34560E-02	447302.9	3778210.4	499.0	4.15	6.05	1.93	YES	HRDOW
L0000510	0	0.34560E-02	447289.9	3778210.4	499.3	4.15	6.05	1.93	YES	HRDOW
L0000511	0	0.34560E-02	447276.9	3778210.3	499.6	4.15	6.05	1.93	YES	HRDOW
L0000512	0	0.34560E-02	447263.9	3778210.3	499.6	4.15	6.05	1.93	YES	HRDOW
L0000513	0	0.34560E-02	447250.9	3778210.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000514	0	0.34560E-02	447238.1	3778207.9	499.4	4.15	6.05	1.93	YES	HRDOW
L0000515	0	0.34560E-02	447225.2	3778205.9	499.3	4.15	6.05	1.93	YES	HRDOW
L0000516	0	0.34560E-02	447213.0	3778201.5	499.0	4.15	6.05	1.93	YES	HRDOW
L0000517	0	0.34560E-02	447200.9	3778196.8	498.7	4.15	6.05	1.93	YES	HRDOW
L0000518	0	0.34560E-02	447188.8	3778192.0	498.4	4.15	6.05	1.93	YES	HRDOW

## Model Output - Residential Receptors Unit Emission Rates (1 g/s)

L0000519	0	0.34560E-02	447176.7	3778187.3	498.0	4.15	6.05	1.93	YES	HRDOW
L0000520	0	0.34560E-02	447164.6	3778182.5	497.7	4.15	6.05	1.93	YES	HRDOW
L0000521	0	0.34560E-02	447152.5	3778177.8	497.4	4.15	6.05	1.93	YES	HRDOW
L0000522	0	0.34560E-02	447140.4	3778173.0	497.1	4.15	6.05	1.93	YES	HRDOW
L0000523	0	0.34560E-02	447128.3	3778168.2	496.8	4.15	6.05	1.93	YES	HRDOW
L0000524	0	0.34560E-02	447116.2	3778163.5	496.4	4.15	6.05	1.93	YES	HRDOW
L0000525	0	0.34560E-02	447104.1	3778158.7	496.1	4.15	6.05	1.93	YES	HRDOW
L0000526	0	0.34560E-02	447092.0	3778154.0	495.8	4.15	6.05	1.93	YES	HRDOW
L0000527	0	0.34560E-02	447079.9	3778149.2	495.5	4.15	6.05	1.93	YES	HRDOW
L0000528	0	0.34560E-02	447067.8	3778144.5	495.1	4.15	6.05	1.93	YES	HRDOW

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

### \*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000529	0	0.34560E-02	447055.7	3778139.7	494.4	4.15	6.05	1.93	YES	HRDOW
L0000530	0	0.34560E-02	447043.6	3778134.9	493.7	4.15	6.05	1.93	YES	HRDOW
L0000531	0	0.34560E-02	447031.2	3778131.3	493.3	4.15	6.05	1.93	YES	HRDOW
L0000532	0	0.34560E-02	447018.6	3778128.1	493.1	4.15	6.05	1.93	YES	HRDOW
L0000533	0	0.34560E-02	447006.0	3778124.9	492.9	4.15	6.05	1.93	YES	HRDOW
L0000534	0	0.34560E-02	446993.1	3778123.3	492.8	4.15	6.05	1.93	YES	HRDOW
L0000535	0	0.34560E-02	446980.2	3778122.6	492.7	4.15	6.05	1.93	YES	HRDOW
L0000536	0	0.34560E-02	446967.2	3778121.9	492.7	4.15	6.05	1.93	YES	HRDOW
L0000537	0	0.34560E-02	446954.2	3778121.2	492.6	4.15	6.05	1.93	YES	HRDOW
L0000538	0	0.34560E-02	446941.2	3778120.6	492.6	4.15	6.05	1.93	YES	HRDOW



Model Output - Residential Receptors  
Unit Emission Rates (1 g/s)

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\*\*\* MODELOPTs:    NonDEFAULT   CONC   FLAT and   ELEV   FLGPOL   URBAN   ADJ\_U\*

\*\*\* AREAPOLY SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X                      Y (METERS)           (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.63243E-05	447089.3	3778831.1	541.0	4.15	38	1.93	YES	HRDOW
PAREA2	0	0.45034E-04	447005.9	3778782.4	537.8	4.15	21	1.93	YES	HRDOW
PAREA3	0	0.12709E-03	447280.1	3778821.1	540.3	4.15	16	1.93	YES	HRDOW
PAREA4	0	0.64386E-04	447359.0	3778758.7	536.2	4.15	16	1.93	YES	HRDOW
PAREA5	0	0.10658E-04	447092.4	3778831.2	541.0	4.15	37	1.93	YES	HRDOW

# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* Construction HRA  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\* Rancho Cucamonga Campus

\*\*\*                    01/19/22  
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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID  
 -----

SOURCE IDs  
 -----

PHASE1	PAREA1	,	,	,	,	,	,	,	,	,						
SLINE1	L0000329	,	L0000330	,	L0000331	,	L0000332	,	L0000333	,	L0000334	,	L0000335	,	L0000336	,
	L0000337	,	L0000338	,	L0000339	,	L0000340	,	L0000341	,	L0000342	,	L0000343	,	L0000344	,
	L0000345	,	L0000346	,	L0000347	,	L0000348	,	L0000349	,	L0000350	,	L0000351	,	L0000352	,
	L0000353	,	L0000354	,	L0000355	,	L0000356	,	L0000357	,	L0000358	,	L0000359	,	L0000360	,
	L0000361	,	L0000362	,	L0000363	,	L0000364	,	L0000365	,	L0000366	,	L0000367	,	L0000368	,
	L0000369	,	L0000370	,	L0000371	,	L0000372	,	L0000373	,	L0000374	,	L0000375	,	L0000376	,
	L0000377	,	L0000378	,	L0000379	,	L0000380	,	L0000381	,	L0000382	,	L0000383	,	L0000384	,
	L0000385	,	L0000386	,	L0000387	,	L0000388	,	L0000389	,	L0000390	,	L0000391	,	L0000392	,
	L0000393	,	L0000394	,	L0000395	,	L0000396	,	L0000397	,	L0000398	,	L0000399	,	L0000400	,
	L0000401	,	L0000402	,	L0000403	,	L0000404	,	L0000405	,	L0000406	,	L0000407	,	L0000408	,
	L0000409	,	L0000410	,	L0000411	,	L0000412	,	L0000413	,	L0000414	,	L0000415	,	L0000416	,
	L0000417	,	L0000418	,	L0000419	,	L0000420	,	L0000421	,	L0000422	,	L0000423	,	L0000424	,
	L0000425	,	L0000426	,	L0000427	,	L0000428	,	L0000429	,	L0000430	,	L0000431	,	L0000432	,
	L0000433	,	L0000434	,	L0000435	,	L0000436	,	L0000437	,	L0000438	,	L0000439	,	L0000440	,
	L0000441	,	L0000442	,	L0000443	,	L0000444	,	L0000445	,	L0000446	,	L0000447	,	L0000448	,
	L0000449	,	L0000450	,	L0000451	,	L0000452	,	L0000453	,	L0000454	,	L0000455	,	L0000456	,
	L0000457	,	L0000458	,	L0000459	,	L0000460	,	L0000461	,	L0000462	,	L0000463	,	L0000464	,
	L0000465	,	L0000466	,	L0000467	,	L0000468	,	L0000469	,	L0000470	,	L0000471	,	L0000472	,
	L0000473	,	L0000474	,	L0000475	,	L0000476	,	L0000477	,	L0000478	,	L0000479	,	L0000480	,

# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* Construction HRA  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\* Rancho Cucamonga Campus

\*\*\*                    01/19/22  
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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs															
	L0000481	,	L0000482	,	L0000483	,	L0000484	,	L0000485	,	L0000486	,	L0000487	,	L0000488	,
	L0000489	,	L0000490	,	L0000491	,	L0000492	,	L0000493	,	L0000494	,	L0000495	,	L0000496	,
	L0000497	,	L0000498	,	L0000499	,	L0000500	,	L0000501	,	L0000502	,	L0000503	,	L0000504	,
	L0000505	,	L0000506	,	L0000507	,	L0000508	,	L0000509	,	L0000510	,	L0000511	,	L0000512	,
	L0000513	,	L0000514	,	L0000515	,	L0000516	,	L0000517	,	L0000518	,	L0000519	,	L0000520	,
	L0000521	,	L0000522	,	L0000523	,	L0000524	,	L0000525	,	L0000526	,	L0000527	,	L0000528	,
	L0000529	,	L0000530	,	L0000531	,	L0000532	,	L0000533	,	L0000534	,	L0000535	,	L0000536	,
	L0000537	,	L0000538	,												
PHASE2	PAREA2	,														
PHASE3	PAREA3	,														
PHASE4	PAREA4	,														
PHASE5	PAREA5	,														
ALLPHASE	PAREA1	,	PAREA2	,	PAREA3	,	PAREA4	,	PAREA5	,						

# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* Construction HRA  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\* Rancho Cucamonga Campus

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs								
-----	-----	-----								
L0000335	2181654.	PAREA1	, L0000329	, L0000330	, L0000331	, L0000332	, L0000333	, L0000334	,	
		L0000336	, L0000337	, L0000338	, L0000339	, L0000340	, L0000341	, L0000342	, L0000343	,
		L0000344	, L0000345	, L0000346	, L0000347	, L0000348	, L0000349	, L0000350	, L0000351	,
		L0000352	, L0000353	, L0000354	, L0000355	, L0000356	, L0000357	, L0000358	, L0000359	,
		L0000360	, L0000361	, L0000362	, L0000363	, L0000364	, L0000365	, L0000366	, L0000367	,
		L0000368	, L0000369	, L0000370	, L0000371	, L0000372	, L0000373	, L0000374	, L0000375	,
		L0000376	, L0000377	, L0000378	, L0000379	, L0000380	, L0000381	, L0000382	, L0000383	,
		L0000384	, L0000385	, L0000386	, L0000387	, L0000388	, L0000389	, L0000390	, L0000391	,
		L0000392	, L0000393	, L0000394	, L0000395	, L0000396	, L0000397	, L0000398	, L0000399	,
		L0000400	, L0000401	, L0000402	, L0000403	, L0000404	, L0000405	, L0000406	, L0000407	,
		L0000408	, L0000409	, L0000410	, L0000411	, L0000412	, L0000413	, L0000414	, L0000415	,
		L0000416	, L0000417	, L0000418	, L0000419	, L0000420	, L0000421	, L0000422	, L0000423	,
		L0000424	, L0000425	, L0000426	, L0000427	, L0000428	, L0000429	, L0000430	, L0000431	,
		L0000432	, L0000433	, L0000434	, L0000435	, L0000436	, L0000437	, L0000438	, L0000439	,
		L0000440	, L0000441	, L0000442	, L0000443	, L0000444	, L0000445	, L0000446	, L0000447	,
		L0000448	, L0000449	, L0000450	, L0000451	, L0000452	, L0000453	, L0000454	, L0000455	,
		L0000456	, L0000457	, L0000458	, L0000459	, L0000460	, L0000461	, L0000462	, L0000463	,
		L0000464	, L0000465	, L0000466	, L0000467	, L0000468	, L0000469	, L0000470	, L0000471	,
		L0000472	, L0000473	, L0000474	, L0000475	, L0000476	, L0000477	, L0000478	, L0000479	,
		L0000480	, L0000481	, L0000482	, L0000483	, L0000484	, L0000485	, L0000486	, L0000487	,

# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* Construction HRA  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\* Rancho Cucamonga Campus

\*\*\*                    01/19/22  
 \*\*\*                    13:02:06  
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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000488	, L0000489	, L0000490 , L0000491 , L0000492 , L0000493 , L0000494 , L0000495 ,
L0000496	, L0000497	, L0000498 , L0000499 , L0000500 , L0000501 , L0000502 , L0000503 ,
L0000504	, L0000505	, L0000506 , L0000507 , L0000508 , L0000509 , L0000510 , L0000511 ,
L0000512	, L0000513	, L0000514 , L0000515 , L0000516 , L0000517 , L0000518 , L0000519 ,
L0000520	, L0000521	, L0000522 , L0000523 , L0000524 , L0000525 , L0000526 , L0000527 ,
L0000528	, L0000529	, L0000530 , L0000531 , L0000532 , L0000533 , L0000534 , L0000535 ,
L0000536	, L0000537	, L0000538 , PAREA2 , PAREA3 , PAREA4 , PAREA5 ,

# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA   ***   01/19/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus ***   13:02:06
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) \*

SOURCE ID = PAREA1 thru PAREA5 ; SOURCE TYPE = AREAPOLY :

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
DAY OF WEEK = WEEKDAY																																															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY																																															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY																																															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** AERMOD - VERSION 21112 ***   *** Construction HRA   ***   01/19/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus ***   13:02:06
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) \*

SOURCE ID = L0000329 thru L0000538 ; SOURCE TYPE = VOLUME :

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
DAY OF WEEK = WEEKDAY																																															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY																																															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY																																															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00



# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA   ***   01/19/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus ***   13:02:06
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*   ***   PAGE 251

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\*\*\* UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA \*\*\*

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Surface file:  MetData\UPLA_v9.SFC           Met Version: 16216
Profile file:  MetData\UPLA_v9.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3102           Upper air station no.: 3190
                        Name: UNKNOWN           Name: UNKNOWN
                        Year: 2012           Year: 2012

```

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
12	01	01	1	01	-21.0	0.218	-9.000	-9.000	-999.	245.	52.4	0.34	1.15	1.00	1.80	351.	9.1	284.2	5.5			
12	01	01	1	02	-21.0	0.218	-9.000	-9.000	-999.	245.	52.4	0.34	1.15	1.00	1.80	347.	9.1	284.2	5.5			
12	01	01	1	03	-25.9	0.270	-9.000	-9.000	-999.	336.	79.9	0.34	1.15	1.00	2.20	340.	9.1	284.2	5.5			
12	01	01	1	04	-20.9	0.218	-9.000	-9.000	-999.	246.	52.4	0.34	1.15	1.00	1.80	337.	9.1	285.4	5.5			
12	01	01	1	05	-5.4	0.105	-9.000	-9.000	-999.	89.	18.5	0.34	1.15	1.00	0.90	344.	9.1	284.9	5.5			
12	01	01	1	06	-11.5	0.154	-9.000	-9.000	-999.	145.	27.6	0.34	1.15	1.00	1.30	17.	9.1	283.1	5.5			
12	01	01	1	07	-11.5	0.154	-9.000	-9.000	-999.	145.	27.6	0.34	1.15	1.00	1.30	326.	9.1	282.0	5.5			
12	01	01	1	08	-10.1	0.156	-9.000	-9.000	-999.	147.	32.6	0.34	1.15	0.53	1.30	337.	9.1	284.9	5.5			
12	01	01	1	09	42.1	0.096	0.369	0.015	42.	72.	-1.8	0.34	1.15	0.31	0.40	347.	9.1	291.4	5.5			
12	01	01	1	10	102.2	0.280	0.715	0.005	125.	356.	-18.8	0.34	1.15	0.24	1.80	320.	9.1	296.4	5.5			
12	01	01	1	11	143.5	0.233	1.110	0.005	333.	271.	-7.7	0.34	1.15	0.21	1.30	185.	9.1	297.5	5.5			
12	01	01	1	12	162.2	0.188	1.407	0.005	600.	196.	-3.6	0.34	1.15	0.20	0.90	199.	9.1	298.1	5.5			
12	01	01	1	13	158.3	0.187	1.641	0.005	974.	195.	-3.6	0.34	1.15	0.20	0.90	152.	9.1	299.9	5.5			
12	01	01	1	14	131.9	0.288	1.687	0.005	1270.	370.	-15.7	0.34	1.15	0.22	1.80	107.	9.1	301.4	5.5			
12	01	01	1	15	84.3	0.106	1.511	0.005	1427.	119.	-1.2	0.34	1.15	0.25	0.40	107.	9.1	302.0	5.5			
12	01	01	1	16	32.1	0.154	1.105	0.005	1463.	146.	-10.0	0.34	1.15	0.34	0.90	124.	9.1	302.0	5.5			
12	01	01	1	17	-10.6	0.155	-9.000	-9.000	-999.	146.	30.5	0.34	1.15	0.62	1.30	138.	9.1	299.9	5.5			
12	01	01	1	18	-20.4	0.219	-9.000	-9.000	-999.	245.	52.5	0.34	1.15	1.00	1.80	353.	9.1	293.1	5.5			
12	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.34	1.15	1.00	999.00	999.	-9.0	291.2	5.5			
12	01	01	1	20	-5.4	0.105	-9.000	-9.000	-999.	81.	18.6	0.34	1.15	1.00	0.90	308.	9.1	289.2	5.5			
12	01	01	1	21	-11.4	0.154	-9.000	-9.000	-999.	145.	27.9	0.34	1.15	1.00	1.30	339.	9.1	287.0	5.5			
12	01	01	1	22	-11.5	0.154	-9.000	-9.000	-999.	145.	27.8	0.34	1.15	1.00	1.30	339.	9.1	286.4	5.5			
12	01	01	1	23	-5.4	0.105	-9.000	-9.000	-999.	81.	18.5	0.34	1.15	1.00	0.90	336.	9.1	285.4	5.5			
12	01	01	1	24	-11.5	0.154	-9.000	-9.000	-999.	145.	27.7	0.34	1.15	1.00	1.30	338.	9.1	284.9	5.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	5.5	0	-999.	-99.00	284.3	99.0	-99.00	-99.00
12	01	01	01	9.1	1	351.	1.80	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)





## Model Output - Residential Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA                               ***   01/19/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus                       ***   13:02:06
                                                                              ***   PAGE 296
  
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*** MODELOPTs:   NonDEFAULT  CONC  FLAT and  ELEV  FLGPOL  URBAN  ADJ_U*
  
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*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: SLINE1 ***
      INCLUDING SOURCE(S):   L0000329   , L0000330   , L0000331   , L0000332   , L0000333   ,
L0000334   , L0000335   , L0000336   , L0000337   , L0000338   , L0000339   , L0000340   , L0000341   ,
L0000342   , L0000343   , L0000344   , L0000345   , L0000346   , L0000347   , L0000348   , L0000349   ,
L0000350   , L0000351   , L0000352   , L0000353   , L0000354   , L0000355   , L0000356   , . . .
  
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### \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3			**		
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
448073.02	3778615.85	0.13157	448093.02	3778615.85	0.12943			
448113.02	3778615.85	0.12705	448133.02	3778615.85	0.12483			
448153.02	3778615.85	0.12260	448173.02	3778615.85	0.12017			
448193.02	3778615.85	0.11770	448233.02	3778615.85	0.11270			
448253.02	3778615.85	0.11021	<b>447913.02</b>	<b>3778635.85</b>	<b>0.14629</b>			<b>MEIR Location</b>
447933.02	3778635.85	0.14465	448253.02	3778635.85	0.11011			
447913.02	3778655.85	0.14743	447933.02	3778655.85	0.14580			
447993.02	3778655.85	0.14056	448013.02	3778655.85	0.13876			
448033.02	3778655.85	0.13691	448053.02	3778655.85	0.13487			
448073.02	3778655.85	0.13268	448113.02	3778655.85	0.12812			
448133.02	3778655.85	0.12585	448153.02	3778655.85	0.12353			
448173.02	3778655.85	0.12104	448193.02	3778655.85	0.11853			
448213.02	3778655.85	0.11599	448233.02	3778655.85	0.11338			
448253.02	3778655.85	0.11075	447913.02	3778675.85	0.14990			
447933.02	3778675.85	0.14827	447953.02	3778675.85	0.14660			
447973.02	3778675.85	0.14488	447993.02	3778675.85	0.14305			
448013.02	3778675.85	0.14122	448033.02	3778675.85	0.13932			
448053.02	3778675.85	0.13725	448073.02	3778675.85	0.13506			
448113.02	3778675.85	0.13044	448133.02	3778675.85	0.12806			
448153.02	3778675.85	0.12560	448173.02	3778675.85	0.12301			
448193.02	3778675.85	0.12041	448213.02	3778675.85	0.11775			
448233.02	3778675.85	0.11499	448253.02	3778675.85	0.11221			
447913.02	3778695.85	0.15390	447933.02	3778695.85	0.15227			
447953.02	3778695.85	0.15061	447973.02	3778695.85	0.14889			
447993.02	3778695.85	0.14704	448013.02	3778695.85	0.14515			
448033.02	3778695.85	0.14317	448053.02	3778695.85	0.14105			
448073.02	3778695.85	0.13883	448113.02	3778695.85	0.13408			
448133.02	3778695.85	0.13155	448153.02	3778695.85	0.12891			
448173.02	3778695.85	0.12618	448193.02	3778695.85	0.12339			
448213.02	3778695.85	0.12053	448233.02	3778695.85	0.11761			
448253.02	3778695.85	0.11460	447913.02	3778715.85	0.15978			
447933.02	3778715.85	0.15812	447953.02	3778715.85	0.15640			
447973.02	3778715.85	0.15461	447993.02	3778715.85	0.15273			
448013.02	3778715.85	0.15076	448033.02	3778715.85	0.14869			









# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA                               ***   01/19/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus                       ***   13:02:06
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*                ***   PAGE 420
  
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\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF DPM                      IN MICROGRAMS/M\*\*3                      \*\*

GROUP ID	AVERAGE CONC			RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID	
				MEIR Location			
PHASE1	1ST HIGHEST VALUE IS	2.41284 AT (	447913.02,	3778635.85,	522.97,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	2.38466 AT (	447913.02,	3778615.85,	522.22,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	2.37485 AT (	447913.02,	3778655.85,	524.27,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	2.31789 AT (	447913.02,	3778595.85,	521.19,	2699.00,	0.00) DC
	5TH HIGHEST VALUE IS	2.21493 AT (	447913.02,	3778575.85,	519.94,	2699.00,	0.00) DC
	6TH HIGHEST VALUE IS	2.16670 AT (	447913.02,	3778675.85,	525.91,	2699.00,	0.00) DC
	7TH HIGHEST VALUE IS	2.05971 AT (	447913.02,	3778555.85,	518.61,	2699.00,	0.00) DC
	8TH HIGHEST VALUE IS	1.81597 AT (	447913.02,	3778535.85,	517.27,	2699.00,	0.00) DC
	9TH HIGHEST VALUE IS	1.81597 AT (	447913.02,	3778695.85,	527.91,	2699.00,	0.00) DC
	10TH HIGHEST VALUE IS	1.68153 AT (	447933.02,	3778635.85,	522.95,	2699.00,	0.00) DC
SLINE1	1ST HIGHEST VALUE IS	3.72141 AT (	448013.02,	3778215.85,	495.95,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	3.71632 AT (	448033.02,	3778215.85,	496.09,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	3.71060 AT (	447913.02,	3778215.85,	495.94,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	3.70501 AT (	447933.02,	3778215.85,	495.94,	2699.00,	0.00) DC
	5TH HIGHEST VALUE IS	3.70036 AT (	447953.02,	3778215.85,	495.94,	2699.00,	0.00) DC
	6TH HIGHEST VALUE IS	3.69740 AT (	447993.02,	3778215.85,	495.94,	2699.00,	0.00) DC
	7TH HIGHEST VALUE IS	3.69351 AT (	447973.02,	3778215.85,	495.94,	2699.00,	0.00) DC
	8TH HIGHEST VALUE IS	3.68781 AT (	446965.69,	3778140.24,	493.90,	2699.00,	0.00) DC
	9TH HIGHEST VALUE IS	3.66076 AT (	446945.69,	3778140.24,	493.90,	2699.00,	0.00) DC
	10TH HIGHEST VALUE IS	3.60725 AT (	448053.02,	3778215.85,	496.74,	2699.00,	0.00) DC
PHASE2	1ST HIGHEST VALUE IS	0.88070 AT (	447366.63,	3779029.42,	556.19,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	0.87786 AT (	447386.63,	3779029.42,	556.23,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	0.87567 AT (	447346.63,	3779029.42,	556.25,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	0.86816 AT (	447406.63,	3779029.42,	556.27,	2699.00,	0.00) DC
	5TH HIGHEST VALUE IS	0.86406 AT (	447326.63,	3779029.42,	556.27,	2699.00,	0.00) DC
	6TH HIGHEST VALUE IS	0.85234 AT (	447426.63,	3779029.42,	556.27,	2699.00,	0.00) DC
	7TH HIGHEST VALUE IS	0.83102 AT (	447446.63,	3779029.42,	556.22,	2699.00,	0.00) DC
	8TH HIGHEST VALUE IS	0.80457 AT (	447466.63,	3779029.42,	556.18,	2699.00,	0.00) DC
	9TH HIGHEST VALUE IS	0.79461 AT (	447266.63,	3779029.42,	556.27,	2699.00,	0.00) DC
	10TH HIGHEST VALUE IS	0.77380 AT (	447486.63,	3779029.42,	556.18,	2699.00,	0.00) DC
PHASE3	1ST HIGHEST VALUE IS	0.52692 AT (	447466.63,	3779029.42,	556.18,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	0.52670 AT (	447486.63,	3779029.42,	556.18,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	0.52362 AT (	447446.63,	3779029.42,	556.22,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	0.52325 AT (	447506.63,	3779029.42,	556.18,	2699.00,	0.00) DC

## Model Output - Residential Receptors Unit Emission Rates (1 g/s)

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5TH HIGHEST VALUE IS      0.51783 AT ( 447526.63, 3779029.42, 555.93, 2699.00, 0.00) DC
6TH HIGHEST VALUE IS      0.51694 AT ( 447426.63, 3779029.42, 556.27, 2699.00, 0.00) DC
7TH HIGHEST VALUE IS      0.51123 AT ( 447546.63, 3779029.42, 555.27, 2699.00, 0.00) DC
8TH HIGHEST VALUE IS      0.50837 AT ( 446878.23, 3778467.21, 514.70, 2699.00, 0.00) DC
9TH HIGHEST VALUE IS      0.50730 AT ( 447406.63, 3779029.42, 556.27, 2699.00, 0.00) DC
10TH HIGHEST VALUE IS     0.50703 AT ( 446878.23, 3778487.21, 516.04, 2699.00, 0.00) DC
*** AERMOD - VERSION 21112 *** *** Construction HRA ***
*** AERMET - VERSION 16216 *** *** Rancho Cucamonga Campus ***
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*

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\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF DPM            IN MICROGRAMS/M\*\*3            \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
PHASE4	1ST HIGHEST VALUE IS	0.44094 AT ( 447913.02, 3778795.85, 535.52, 2699.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.43926 AT ( 447913.02, 3778775.85, 534.15, 2699.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.43913 AT ( 447913.02, 3778815.85, 536.94, 2699.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.43401 AT ( 447913.02, 3778755.85, 532.79, 2699.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.43273 AT ( 447913.02, 3778835.85, 538.20, 2699.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.42550 AT ( 447913.02, 3778735.85, 530.87, 2699.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.42295 AT ( 447913.02, 3778855.85, 539.52, 2699.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.41356 AT ( 447913.02, 3778715.85, 529.27, 2699.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.41014 AT ( 447913.02, 3778875.85, 540.94, 2699.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.40989 AT ( 447933.02, 3778795.85, 535.06, 2699.00, 0.00)	DC	
PHASE5	1ST HIGHEST VALUE IS	3.90288 AT ( 447913.02, 3778415.85, 509.27, 2699.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	3.85769 AT ( 447913.02, 3778395.85, 507.94, 2699.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	3.74676 AT ( 447913.02, 3778435.85, 510.64, 2699.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	3.71247 AT ( 447913.02, 3778375.85, 506.61, 2699.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	3.50581 AT ( 447913.02, 3778355.85, 505.27, 2699.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	3.28815 AT ( 447913.02, 3778455.85, 512.06, 2699.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	3.24769 AT ( 447913.02, 3778335.85, 503.94, 2699.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	2.93474 AT ( 447913.02, 3778315.85, 502.52, 2699.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	2.87075 AT ( 447933.02, 3778415.85, 509.27, 2699.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	2.84179 AT ( 447933.02, 3778395.85, 507.94, 2699.00, 0.00)	DC	

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*** RECEPTOR TYPES: GC = GRIDCART
                       GP = GRIDPOLR
                       DC = DISCCART
                       DP = DISCPOLR

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# Model Output - Residential Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* Construction HRA  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\* Rancho Cucamonga Campus

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\*\*\* 13:02:06  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
A Total of 2 Warning Message(s)  
A Total of 956 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 49 Calm Hours Identified  
  
A Total of 907 Missing Hours Identified ( 2.07 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 5131 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used 0.50  
ME W187 5131 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

# Model Output - School Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* Construction HRA\_Banyan Elementary School \*\*\* 01/26/22  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\* Rancho Cucamonga Campus \*\*\* 21:43:44  
PAGE 1

\*\*\* MODELOPTS: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

-----  
\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --  
\*\*NO GAS DEPOSITION Data Provided.  
\*\*NO PARTICLE DEPOSITION Data Provided.  
\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F  
\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 215 Source(s),  
for Total of 1 Urban Area(s):  
Urban Population = 2181654.0 ; Urban Roughness Length = 1.000 m

\*\*Model Allows User-Specified Options:  
1. Stack-tip Downwash.  
2. Allow FLAT/ELEV Terrain Option by Source,  
with 0 FLAT and 215 ELEV Source(s).  
3. Use Calms Processing Routine.  
4. Use Missing Data Processing Routine.  
5. No Exponential Decay.  
6. Urban Roughness Length of 1.0 Meter Used.

\*\*Other Options Specified:  
ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET  
TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: DPM

\*\*Model Calculates PERIOD Averages Only

\*\*This Run Includes: 215 Source(s); 7 Source Group(s); and 98 Receptor(s)

with: 0 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)  
and: 210 VOLUME source(s)  
and: 5 AREA type source(s)  
and: 0 LINE source(s)  
and: 0 RLINE/RLINEXT source(s)  
and: 0 OPENPIT source(s)  
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

## Model Output - School Receptors Unit Emission Rates (1 g/s)

\*\*Model Set To Continue RUNNING After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 16216

\*\*Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 379.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.9 MB of RAM.

\*\*Input Runstream File: aermod.inp

\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: CCCD-01ES.err

\*\*File for Summary of Results: CCCD-01ES.sum

## Model Output - School Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*      \*\*\* Construction HRA\_Banyan Elementary School  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\* Rancho Cucamonga Campus

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

### \*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000329	0	0.47326E-02	448274.8	3778998.9	543.1	4.15	8.37	1.93	YES	HRDOW
L0000330	0	0.47326E-02	448256.8	3778998.7	543.5	4.15	8.37	1.93	YES	HRDOW
L0000331	0	0.47326E-02	448238.8	3778998.5	544.1	4.15	8.37	1.93	YES	HRDOW
L0000332	0	0.47326E-02	448220.8	3778998.3	544.1	4.15	8.37	1.93	YES	HRDOW
L0000333	0	0.47326E-02	448202.8	3778998.2	544.3	4.15	8.37	1.93	YES	HRDOW
L0000334	0	0.47326E-02	448184.8	3778998.0	544.9	4.15	8.37	1.93	YES	HRDOW
L0000335	0	0.47326E-02	448166.8	3778997.8	545.0	4.15	8.37	1.93	YES	HRDOW
L0000336	0	0.47326E-02	448148.8	3778997.6	545.1	4.15	8.37	1.93	YES	HRDOW
L0000337	0	0.47326E-02	448130.8	3778997.4	545.7	4.15	8.37	1.93	YES	HRDOW
L0000338	0	0.47326E-02	448112.8	3778997.3	546.2	4.15	8.37	1.93	YES	HRDOW
L0000339	0	0.47326E-02	448094.8	3778997.1	546.8	4.15	8.37	1.93	YES	HRDOW
L0000340	0	0.47326E-02	448076.8	3778996.9	547.4	4.15	8.37	1.93	YES	HRDOW
L0000341	0	0.47326E-02	448058.8	3778996.7	548.0	4.15	8.37	1.93	YES	HRDOW
L0000342	0	0.47326E-02	448040.8	3778996.5	548.6	4.15	8.37	1.93	YES	HRDOW
L0000343	0	0.47326E-02	448022.8	3778996.3	549.2	4.15	8.37	1.93	YES	HRDOW
L0000344	0	0.47326E-02	448004.8	3778996.2	549.8	4.15	8.37	1.93	YES	HRDOW
L0000345	0	0.47326E-02	447986.8	3778996.0	549.9	4.15	8.37	1.93	YES	HRDOW
L0000346	0	0.47326E-02	447968.8	3778995.8	549.9	4.15	8.37	1.93	YES	HRDOW
L0000347	0	0.47326E-02	447950.8	3778995.6	549.3	4.15	8.37	1.93	YES	HRDOW
L0000348	0	0.47326E-02	447932.8	3778995.4	549.1	4.15	8.37	1.93	YES	HRDOW
L0000349	0	0.47326E-02	447914.8	3778995.3	549.7	4.15	8.37	1.93	YES	HRDOW
L0000350	0	0.47326E-02	447896.8	3778995.1	549.9	4.15	8.37	1.93	YES	HRDOW
L0000351	0	0.47326E-02	447878.8	3778994.9	549.9	4.15	8.37	1.93	YES	HRDOW
L0000352	0	0.47326E-02	447860.8	3778994.7	549.9	4.15	8.37	1.93	YES	HRDOW
L0000353	0	0.47326E-02	447842.8	3778994.5	550.1	4.15	8.37	1.93	YES	HRDOW
L0000354	0	0.47326E-02	447824.8	3778994.3	550.7	4.15	8.37	1.93	YES	HRDOW
L0000355	0	0.47326E-02	447806.8	3778994.2	550.8	4.15	8.37	1.93	YES	HRDOW
L0000356	0	0.47326E-02	447788.8	3778994.0	550.8	4.15	8.37	1.93	YES	HRDOW
L0000357	0	0.47326E-02	447770.8	3778993.8	550.7	4.15	8.37	1.93	YES	HRDOW
L0000358	0	0.47326E-02	447752.8	3778993.6	550.7	4.15	8.37	1.93	YES	HRDOW
L0000359	0	0.47326E-02	447734.8	3778993.4	550.8	4.15	8.37	1.93	YES	HRDOW
L0000360	0	0.47326E-02	447716.8	3778993.3	551.2	4.15	8.37	1.93	YES	HRDOW
L0000361	0	0.47326E-02	447698.8	3778993.1	551.8	4.15	8.37	1.93	YES	HRDOW
L0000362	0	0.47326E-02	447680.8	3778992.9	552.4	4.15	8.37	1.93	YES	HRDOW
L0000363	0	0.47326E-02	447662.8	3778992.7	552.7	4.15	8.37	1.93	YES	HRDOW
L0000364	0	0.47326E-02	447644.8	3778992.5	552.7	4.15	8.37	1.93	YES	HRDOW
L0000365	0	0.47326E-02	447626.8	3778992.3	552.7	4.15	8.37	1.93	YES	HRDOW
L0000366	0	0.47326E-02	447608.8	3778992.2	552.7	4.15	8.37	1.93	YES	HRDOW

## Model Output - School Receptors Unit Emission Rates (1 g/s)

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L0000367      0  0.47326E-02  447590.8  3778992.0  552.7    4.15    8.37    1.93    YES  HRDOW
L0000368      0  0.47326E-02  447572.8  3778991.8  552.7    4.15    8.37    1.93    YES  HRDOW
*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus
  
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21:43:44
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000369	0	0.47326E-02	447554.8	3778991.6	552.7	4.15	8.37	1.93	YES	HRDOW
L0000370	0	0.47326E-02	447536.8	3778991.4	553.1	4.15	8.37	1.93	YES	HRDOW
L0000371	0	0.47326E-02	447518.9	3778991.3	553.6	4.15	8.37	1.93	YES	HRDOW
L0000372	0	0.47326E-02	447500.9	3778991.1	553.6	4.15	8.37	1.93	YES	HRDOW
L0000373	0	0.47326E-02	447482.9	3778991.1	553.6	4.15	8.37	1.93	YES	HRDOW
L0000374	0	0.47326E-02	447464.9	3778991.4	553.6	4.15	8.37	1.93	YES	HRDOW
L0000375	0	0.47326E-02	447446.9	3778991.7	553.7	4.15	8.37	1.93	YES	HRDOW
L0000376	0	0.47326E-02	447428.9	3778992.0	553.7	4.15	8.37	1.93	YES	HRDOW
L0000377	0	0.47326E-02	447410.9	3778992.3	553.7	4.15	8.37	1.93	YES	HRDOW
L0000378	0	0.47326E-02	447392.9	3778992.6	553.7	4.15	8.37	1.93	YES	HRDOW
L0000379	0	0.47326E-02	447374.9	3778992.9	553.7	4.15	8.37	1.93	YES	HRDOW
L0000380	0	0.47326E-02	447356.9	3778993.2	553.8	4.15	8.37	1.93	YES	HRDOW
L0000381	0	0.47326E-02	447338.9	3778993.5	553.8	4.15	8.37	1.93	YES	HRDOW
L0000382	0	0.47326E-02	447320.9	3778993.8	553.8	4.15	8.37	1.93	YES	HRDOW
L0000383	0	0.47326E-02	447302.9	3778994.1	553.8	4.15	8.37	1.93	YES	HRDOW
L0000384	0	0.47326E-02	447284.9	3778994.4	553.8	4.15	8.37	1.93	YES	HRDOW
L0000385	0	0.47326E-02	447266.9	3778994.6	553.8	4.15	8.37	1.93	YES	HRDOW
L0000386	0	0.47326E-02	447248.9	3778994.9	553.8	4.15	8.37	1.93	YES	HRDOW
L0000387	0	0.47326E-02	447230.9	3778995.2	553.8	4.15	8.37	1.93	YES	HRDOW
L0000388	0	0.47326E-02	447212.9	3778995.5	553.9	4.15	8.37	1.93	YES	HRDOW
L0000389	0	0.47326E-02	447194.9	3778995.8	553.9	4.15	8.37	1.93	YES	HRDOW
L0000390	0	0.47326E-02	447176.9	3778996.1	554.0	4.15	8.37	1.93	YES	HRDOW
L0000391	0	0.47326E-02	447158.9	3778996.4	554.0	4.15	8.37	1.93	YES	HRDOW
L0000392	0	0.47326E-02	447140.9	3778996.7	554.0	4.15	8.37	1.93	YES	HRDOW
L0000393	0	0.47326E-02	447122.9	3778997.0	554.0	4.15	8.37	1.93	YES	HRDOW
L0000394	0	0.47326E-02	447104.9	3778997.3	554.0	4.15	8.37	1.93	YES	HRDOW
L0000395	0	0.47326E-02	447086.9	3778997.6	554.0	4.15	8.37	1.93	YES	HRDOW
L0000396	0	0.47326E-02	447068.9	3778997.9	554.1	4.15	8.37	1.93	YES	HRDOW
L0000397	0	0.47326E-02	447050.9	3778998.1	554.1	4.15	8.37	1.93	YES	HRDOW
L0000398	0	0.47326E-02	447032.9	3778998.4	554.3	4.15	8.37	1.93	YES	HRDOW
L0000399	0	0.47326E-02	447014.9	3778998.7	554.9	4.15	8.37	1.93	YES	HRDOW
L0000400	0	0.47326E-02	446996.9	3778999.0	555.1	4.15	8.37	1.93	YES	HRDOW
L0000401	0	0.47326E-02	446978.9	3778999.3	555.2	4.15	8.37	1.93	YES	HRDOW
L0000402	0	0.47326E-02	446960.9	3778999.6	555.2	4.15	8.37	1.93	YES	HRDOW
L0000403	0	0.47326E-02	446942.9	3778999.9	555.4	4.15	8.37	1.93	YES	HRDOW
L0000404	0	0.76071E-02	446928.3	3779189.2	570.2	4.15	13.49	1.93	YES	HRDOW

## Model Output - School Receptors Unit Emission Rates (1 g/s)

L0000405	0	0.76071E-02	446927.9	3779160.2	567.7	4.15	13.49	1.93	YES	HRDOW
L0000406	0	0.76071E-02	446927.4	3779131.2	565.3	4.15	13.49	1.93	YES	HRDOW
L0000407	0	0.76071E-02	446927.0	3779102.2	562.9	4.15	13.49	1.93	YES	HRDOW
L0000408	0	0.76071E-02	446926.5	3779073.2	561.0	4.15	13.49	1.93	YES	HRDOW

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### \*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000409	0	0.76071E-02	446926.1	3779044.2	559.1	4.15	13.49	1.93	YES	HRDOW
L0000410	0	0.76071E-02	446925.6	3779015.2	557.0	4.15	13.49	1.93	YES	HRDOW
L0000411	0	0.76071E-02	446925.2	3778986.2	554.8	4.15	13.49	1.93	YES	HRDOW
L0000412	0	0.76071E-02	446924.8	3778957.2	552.6	4.15	13.49	1.93	YES	HRDOW
L0000413	0	0.76071E-02	446924.3	3778928.2	551.3	4.15	13.49	1.93	YES	HRDOW
L0000414	0	0.76071E-02	446923.9	3778899.2	549.2	4.15	13.49	1.93	YES	HRDOW
L0000415	0	0.76071E-02	446923.4	3778870.2	546.3	4.15	13.49	1.93	YES	HRDOW
L0000416	0	0.76071E-02	446923.0	3778841.2	543.4	4.15	13.49	1.93	YES	HRDOW
L0000417	0	0.76071E-02	446922.5	3778812.2	540.7	4.15	13.49	1.93	YES	HRDOW
L0000418	0	0.76071E-02	446922.1	3778783.2	538.8	4.15	13.49	1.93	YES	HRDOW
L0000419	0	0.76071E-02	446921.6	3778754.2	536.7	4.15	13.49	1.93	YES	HRDOW
L0000420	0	0.76071E-02	446921.2	3778725.2	533.9	4.15	13.49	1.93	YES	HRDOW
L0000421	0	0.76071E-02	446920.7	3778696.2	532.0	4.15	13.49	1.93	YES	HRDOW
L0000422	0	0.76071E-02	446920.3	3778667.2	530.0	4.15	13.49	1.93	YES	HRDOW
L0000423	0	0.76071E-02	446919.8	3778638.2	528.1	4.15	13.49	1.93	YES	HRDOW
L0000424	0	0.76071E-02	446919.4	3778609.2	526.2	4.15	13.49	1.93	YES	HRDOW
L0000425	0	0.76071E-02	446919.0	3778580.2	524.2	4.15	13.49	1.93	YES	HRDOW
L0000426	0	0.76071E-02	446918.5	3778551.2	521.4	4.15	13.49	1.93	YES	HRDOW
L0000427	0	0.76071E-02	446918.1	3778522.2	519.4	4.15	13.49	1.93	YES	HRDOW
L0000428	0	0.76071E-02	446917.6	3778493.2	517.4	4.15	13.49	1.93	YES	HRDOW
L0000429	0	0.76071E-02	446917.2	3778464.2	515.4	4.15	13.49	1.93	YES	HRDOW
L0000430	0	0.76071E-02	446916.7	3778435.2	513.5	4.15	13.49	1.93	YES	HRDOW
L0000431	0	0.76071E-02	446916.3	3778406.3	511.6	4.15	13.49	1.93	YES	HRDOW
L0000432	0	0.76071E-02	446915.8	3778377.3	509.7	4.15	13.49	1.93	YES	HRDOW
L0000433	0	0.76071E-02	446915.4	3778348.3	507.8	4.15	13.49	1.93	YES	HRDOW
L0000434	0	0.76071E-02	446914.9	3778319.3	505.4	4.15	13.49	1.93	YES	HRDOW
L0000435	0	0.76071E-02	446914.5	3778290.3	503.3	4.15	13.49	1.93	YES	HRDOW
L0000436	0	0.76071E-02	446914.0	3778261.3	501.6	4.15	13.49	1.93	YES	HRDOW
L0000437	0	0.76071E-02	446913.6	3778232.3	500.0	4.15	13.49	1.93	YES	HRDOW
L0000438	0	0.76071E-02	446913.2	3778203.3	498.2	4.15	13.49	1.93	YES	HRDOW
L0000439	0	0.76071E-02	446912.7	3778174.3	496.3	4.15	13.49	1.93	YES	HRDOW
L0000440	0	0.76071E-02	446912.3	3778145.3	494.4	4.15	13.49	1.93	YES	HRDOW
L0000441	0	0.76071E-02	446911.8	3778116.3	492.3	4.15	13.49	1.93	YES	HRDOW
L0000442	0	0.76071E-02	446911.4	3778087.3	490.4	4.15	13.49	1.93	YES	HRDOW

## Model Output - School Receptors Unit Emission Rates (1 g/s)

L0000443	0	0.76071E-02	446910.9	3778058.3	488.4	4.15	13.49	1.93	YES	HRDOW
L0000444	0	0.76071E-02	446910.5	3778029.3	486.5	4.15	13.49	1.93	YES	HRDOW
L0000445	0	0.76071E-02	446910.0	3778000.3	484.6	4.15	13.49	1.93	YES	HRDOW
L0000446	0	0.76071E-02	446909.6	3777971.3	482.6	4.15	13.49	1.93	YES	HRDOW
L0000447	0	0.34560E-02	448108.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW
L0000448	0	0.34560E-02	448095.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW

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### \*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000449	0	0.34560E-02	448082.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW
L0000450	0	0.34560E-02	448069.3	3778200.0	495.9	4.15	6.05	1.93	YES	HRDOW
L0000451	0	0.34560E-02	448056.3	3778200.0	495.8	4.15	6.05	1.93	YES	HRDOW
L0000452	0	0.34560E-02	448043.3	3778200.0	495.7	4.15	6.05	1.93	YES	HRDOW
L0000453	0	0.34560E-02	448030.3	3778200.0	495.5	4.15	6.05	1.93	YES	HRDOW
L0000454	0	0.34560E-02	448017.3	3778200.0	495.2	4.15	6.05	1.93	YES	HRDOW
L0000455	0	0.34560E-02	448004.3	3778200.0	495.0	4.15	6.05	1.93	YES	HRDOW
L0000456	0	0.34560E-02	447991.3	3778200.0	494.9	4.15	6.05	1.93	YES	HRDOW
L0000457	0	0.34560E-02	447978.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000458	0	0.34560E-02	447965.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000459	0	0.34560E-02	447952.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000460	0	0.34560E-02	447939.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000461	0	0.34560E-02	447926.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000462	0	0.34560E-02	447913.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000463	0	0.34560E-02	447900.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000464	0	0.34560E-02	447887.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000465	0	0.34560E-02	447874.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000466	0	0.34560E-02	447861.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000467	0	0.34560E-02	447848.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000468	0	0.34560E-02	447835.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000469	0	0.34560E-02	447822.3	3778199.9	494.9	4.15	6.05	1.93	YES	HRDOW
L0000470	0	0.34560E-02	447809.3	3778199.9	495.1	4.15	6.05	1.93	YES	HRDOW
L0000471	0	0.34560E-02	447796.3	3778199.9	495.3	4.15	6.05	1.93	YES	HRDOW
L0000472	0	0.34560E-02	447783.3	3778199.9	495.5	4.15	6.05	1.93	YES	HRDOW
L0000473	0	0.34560E-02	447770.3	3778199.9	495.7	4.15	6.05	1.93	YES	HRDOW
L0000474	0	0.34560E-02	447757.3	3778199.9	495.9	4.15	6.05	1.93	YES	HRDOW
L0000475	0	0.34560E-02	447744.3	3778199.9	496.2	4.15	6.05	1.93	YES	HRDOW
L0000476	0	0.34560E-02	447731.3	3778199.9	496.4	4.15	6.05	1.93	YES	HRDOW
L0000477	0	0.34560E-02	447718.3	3778199.9	496.6	4.15	6.05	1.93	YES	HRDOW
L0000478	0	0.34560E-02	447705.3	3778199.9	496.8	4.15	6.05	1.93	YES	HRDOW
L0000479	0	0.34560E-02	447692.4	3778200.5	496.9	4.15	6.05	1.93	YES	HRDOW
L0000480	0	0.34560E-02	447679.4	3778201.7	497.0	4.15	6.05	1.93	YES	HRDOW

**Model Output - School Receptors  
Unit Emission Rates (1 g/s)**

L0000481	0	0.34560E-02	447666.5	3778202.9	497.1	4.15	6.05	1.93	YES	HRDOW
L0000482	0	0.34560E-02	447653.5	3778204.2	497.2	4.15	6.05	1.93	YES	HRDOW
L0000483	0	0.34560E-02	447640.6	3778205.4	497.2	4.15	6.05	1.93	YES	HRDOW
L0000484	0	0.34560E-02	447627.7	3778206.6	497.3	4.15	6.05	1.93	YES	HRDOW
L0000485	0	0.34560E-02	447614.7	3778207.8	497.4	4.15	6.05	1.93	YES	HRDOW
L0000486	0	0.34560E-02	447601.8	3778209.0	497.6	4.15	6.05	1.93	YES	HRDOW
L0000487	0	0.34560E-02	447588.8	3778210.3	497.7	4.15	6.05	1.93	YES	HRDOW
L0000488	0	0.34560E-02	447575.9	3778211.2	497.9	4.15	6.05	1.93	YES	HRDOW

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\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000489	0	0.34560E-02	447562.9	3778211.2	498.3	4.15	6.05	1.93	YES	HRDOW
L0000490	0	0.34560E-02	447549.9	3778211.2	498.6	4.15	6.05	1.93	YES	HRDOW
L0000491	0	0.34560E-02	447536.9	3778211.1	499.0	4.15	6.05	1.93	YES	HRDOW
L0000492	0	0.34560E-02	447523.9	3778211.1	499.5	4.15	6.05	1.93	YES	HRDOW
L0000493	0	0.34560E-02	447510.9	3778211.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000494	0	0.34560E-02	447497.9	3778211.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000495	0	0.34560E-02	447484.9	3778211.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000496	0	0.34560E-02	447471.9	3778210.9	499.6	4.15	6.05	1.93	YES	HRDOW
L0000497	0	0.34560E-02	447458.9	3778210.9	499.6	4.15	6.05	1.93	YES	HRDOW
L0000498	0	0.34560E-02	447445.9	3778210.8	499.2	4.15	6.05	1.93	YES	HRDOW
L0000499	0	0.34560E-02	447432.9	3778210.8	498.9	4.15	6.05	1.93	YES	HRDOW
L0000500	0	0.34560E-02	447419.9	3778210.8	498.7	4.15	6.05	1.93	YES	HRDOW
L0000501	0	0.34560E-02	447406.9	3778210.7	498.7	4.15	6.05	1.93	YES	HRDOW
L0000502	0	0.34560E-02	447393.9	3778210.7	498.6	4.15	6.05	1.93	YES	HRDOW
L0000503	0	0.34560E-02	447380.9	3778210.6	498.7	4.15	6.05	1.93	YES	HRDOW
L0000504	0	0.34560E-02	447367.9	3778210.6	498.8	4.15	6.05	1.93	YES	HRDOW
L0000505	0	0.34560E-02	447354.9	3778210.6	498.8	4.15	6.05	1.93	YES	HRDOW
L0000506	0	0.34560E-02	447341.9	3778210.5	498.8	4.15	6.05	1.93	YES	HRDOW
L0000507	0	0.34560E-02	447328.9	3778210.5	498.8	4.15	6.05	1.93	YES	HRDOW
L0000508	0	0.34560E-02	447315.9	3778210.5	498.8	4.15	6.05	1.93	YES	HRDOW
L0000509	0	0.34560E-02	447302.9	3778210.4	499.0	4.15	6.05	1.93	YES	HRDOW
L0000510	0	0.34560E-02	447289.9	3778210.4	499.3	4.15	6.05	1.93	YES	HRDOW
L0000511	0	0.34560E-02	447276.9	3778210.3	499.6	4.15	6.05	1.93	YES	HRDOW
L0000512	0	0.34560E-02	447263.9	3778210.3	499.6	4.15	6.05	1.93	YES	HRDOW
L0000513	0	0.34560E-02	447250.9	3778210.0	499.6	4.15	6.05	1.93	YES	HRDOW
L0000514	0	0.34560E-02	447238.1	3778207.9	499.4	4.15	6.05	1.93	YES	HRDOW
L0000515	0	0.34560E-02	447225.2	3778205.9	499.3	4.15	6.05	1.93	YES	HRDOW
L0000516	0	0.34560E-02	447213.0	3778201.5	499.0	4.15	6.05	1.93	YES	HRDOW
L0000517	0	0.34560E-02	447200.9	3778196.8	498.7	4.15	6.05	1.93	YES	HRDOW
L0000518	0	0.34560E-02	447188.8	3778192.0	498.4	4.15	6.05	1.93	YES	HRDOW



**Model Output - School Receptors  
Unit Emission Rates (1 g/s)**

L0000519	0	0.34560E-02	447176.7	3778187.3	498.0	4.15	6.05	1.93	YES	HRDOW
L0000520	0	0.34560E-02	447164.6	3778182.5	497.7	4.15	6.05	1.93	YES	HRDOW
L0000521	0	0.34560E-02	447152.5	3778177.8	497.4	4.15	6.05	1.93	YES	HRDOW
L0000522	0	0.34560E-02	447140.4	3778173.0	497.1	4.15	6.05	1.93	YES	HRDOW
L0000523	0	0.34560E-02	447128.3	3778168.2	496.8	4.15	6.05	1.93	YES	HRDOW
L0000524	0	0.34560E-02	447116.2	3778163.5	496.4	4.15	6.05	1.93	YES	HRDOW
L0000525	0	0.34560E-02	447104.1	3778158.7	496.1	4.15	6.05	1.93	YES	HRDOW
L0000526	0	0.34560E-02	447092.0	3778154.0	495.8	4.15	6.05	1.93	YES	HRDOW
L0000527	0	0.34560E-02	447079.9	3778149.2	495.5	4.15	6.05	1.93	YES	HRDOW
L0000528	0	0.34560E-02	447067.8	3778144.5	495.1	4.15	6.05	1.93	YES	HRDOW

\*\*\* AERMOD - VERSION 21112 \*\*\*      \*\*\* Construction HRA\_Banyan Elementary School  
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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000529	0	0.34560E-02	447055.7	3778139.7	494.4	4.15	6.05	1.93	YES	HRDOW
L0000530	0	0.34560E-02	447043.6	3778134.9	493.7	4.15	6.05	1.93	YES	HRDOW
L0000531	0	0.34560E-02	447031.2	3778131.3	493.3	4.15	6.05	1.93	YES	HRDOW
L0000532	0	0.34560E-02	447018.6	3778128.1	493.1	4.15	6.05	1.93	YES	HRDOW
L0000533	0	0.34560E-02	447006.0	3778124.9	492.9	4.15	6.05	1.93	YES	HRDOW
L0000534	0	0.34560E-02	446993.1	3778123.3	492.8	4.15	6.05	1.93	YES	HRDOW
L0000535	0	0.34560E-02	446980.2	3778122.6	492.7	4.15	6.05	1.93	YES	HRDOW
L0000536	0	0.34560E-02	446967.2	3778121.9	492.7	4.15	6.05	1.93	YES	HRDOW
L0000537	0	0.34560E-02	446954.2	3778121.2	492.6	4.15	6.05	1.93	YES	HRDOW
L0000538	0	0.34560E-02	446941.2	3778120.6	492.6	4.15	6.05	1.93	YES	HRDOW

## Model Output - School Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus   ***   ***   21:43:44
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*   ***   PAGE   8
  
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### \*\*\* AREAPOLY SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.63243E-05	447089.3	3778831.1	541.0	4.15	38	1.93	YES	HRDOW
PAREA2	0	0.45034E-04	447005.9	3778782.4	537.8	4.15	21	1.93	YES	HRDOW
PAREA3	0	0.12709E-03	447280.1	3778821.1	540.3	4.15	16	1.93	YES	HRDOW
PAREA4	0	0.64386E-04	447359.0	3778758.7	536.2	4.15	16	1.93	YES	HRDOW
PAREA5	0	0.10658E-04	447092.4	3778831.2	541.0	4.15	37	1.93	YES	HRDOW

# Model Output - School Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* Construction HRA\_Banyan Elementary School  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\* Rancho Cucamonga Campus  
 \*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

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\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs															
-----	-----															
PHASE1	PAREA1	,														
SLINE1	L0000329	,	L0000330	,	L0000331	,	L0000332	,	L0000333	,	L0000334	,	L0000335	,	L0000336	,
	L0000337	,	L0000338	,	L0000339	,	L0000340	,	L0000341	,	L0000342	,	L0000343	,	L0000344	,
	L0000345	,	L0000346	,	L0000347	,	L0000348	,	L0000349	,	L0000350	,	L0000351	,	L0000352	,
	L0000353	,	L0000354	,	L0000355	,	L0000356	,	L0000357	,	L0000358	,	L0000359	,	L0000360	,
	L0000361	,	L0000362	,	L0000363	,	L0000364	,	L0000365	,	L0000366	,	L0000367	,	L0000368	,
	L0000369	,	L0000370	,	L0000371	,	L0000372	,	L0000373	,	L0000374	,	L0000375	,	L0000376	,
	L0000377	,	L0000378	,	L0000379	,	L0000380	,	L0000381	,	L0000382	,	L0000383	,	L0000384	,
	L0000385	,	L0000386	,	L0000387	,	L0000388	,	L0000389	,	L0000390	,	L0000391	,	L0000392	,
	L0000393	,	L0000394	,	L0000395	,	L0000396	,	L0000397	,	L0000398	,	L0000399	,	L0000400	,
	L0000401	,	L0000402	,	L0000403	,	L0000404	,	L0000405	,	L0000406	,	L0000407	,	L0000408	,
	L0000409	,	L0000410	,	L0000411	,	L0000412	,	L0000413	,	L0000414	,	L0000415	,	L0000416	,
	L0000417	,	L0000418	,	L0000419	,	L0000420	,	L0000421	,	L0000422	,	L0000423	,	L0000424	,
	L0000425	,	L0000426	,	L0000427	,	L0000428	,	L0000429	,	L0000430	,	L0000431	,	L0000432	,
	L0000433	,	L0000434	,	L0000435	,	L0000436	,	L0000437	,	L0000438	,	L0000439	,	L0000440	,
	L0000441	,	L0000442	,	L0000443	,	L0000444	,	L0000445	,	L0000446	,	L0000447	,	L0000448	,
	L0000449	,	L0000450	,	L0000451	,	L0000452	,	L0000453	,	L0000454	,	L0000455	,	L0000456	,
	L0000457	,	L0000458	,	L0000459	,	L0000460	,	L0000461	,	L0000462	,	L0000463	,	L0000464	,
	L0000465	,	L0000466	,	L0000467	,	L0000468	,	L0000469	,	L0000470	,	L0000471	,	L0000472	,
	L0000473	,	L0000474	,	L0000475	,	L0000476	,	L0000477	,	L0000478	,	L0000479	,	L0000480	,

# Model Output - School Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***   01/26/22
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\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs															
	L0000481	,	L0000482	,	L0000483	,	L0000484	,	L0000485	,	L0000486	,	L0000487	,	L0000488	,
	L0000489	,	L0000490	,	L0000491	,	L0000492	,	L0000493	,	L0000494	,	L0000495	,	L0000496	,
	L0000497	,	L0000498	,	L0000499	,	L0000500	,	L0000501	,	L0000502	,	L0000503	,	L0000504	,
	L0000505	,	L0000506	,	L0000507	,	L0000508	,	L0000509	,	L0000510	,	L0000511	,	L0000512	,
	L0000513	,	L0000514	,	L0000515	,	L0000516	,	L0000517	,	L0000518	,	L0000519	,	L0000520	,
	L0000521	,	L0000522	,	L0000523	,	L0000524	,	L0000525	,	L0000526	,	L0000527	,	L0000528	,
	L0000529	,	L0000530	,	L0000531	,	L0000532	,	L0000533	,	L0000534	,	L0000535	,	L0000536	,
	L0000537	,	L0000538	,		,		,		,		,		,		,
PHASE2	PAREA2	,		,		,		,		,		,		,		,
PHASE3	PAREA3	,		,		,		,		,		,		,		,
PHASE4	PAREA4	,		,		,		,		,		,		,		,
PHASE5	PAREA5	,		,		,		,		,		,		,		,
ALLPHASE	PAREA1	,	PAREA2	,	PAREA3	,	PAREA4	,	PAREA5	,		,		,		,

# Model Output - School Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* Construction HRA\_Banyan Elementary School  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\* Rancho Cucamonga Campus

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs							
-----	-----	-----							
L0000335	2181654.	PAREA1	, L0000329	, L0000330	, L0000331	, L0000332	, L0000333	, L0000334	,
	,								
	L0000336	, L0000337	, L0000338	, L0000339	, L0000340	, L0000341	, L0000342	, L0000343	,
	L0000344	, L0000345	, L0000346	, L0000347	, L0000348	, L0000349	, L0000350	, L0000351	,
	L0000352	, L0000353	, L0000354	, L0000355	, L0000356	, L0000357	, L0000358	, L0000359	,
	L0000360	, L0000361	, L0000362	, L0000363	, L0000364	, L0000365	, L0000366	, L0000367	,
	L0000368	, L0000369	, L0000370	, L0000371	, L0000372	, L0000373	, L0000374	, L0000375	,
	L0000376	, L0000377	, L0000378	, L0000379	, L0000380	, L0000381	, L0000382	, L0000383	,
	L0000384	, L0000385	, L0000386	, L0000387	, L0000388	, L0000389	, L0000390	, L0000391	,
	L0000392	, L0000393	, L0000394	, L0000395	, L0000396	, L0000397	, L0000398	, L0000399	,
	L0000400	, L0000401	, L0000402	, L0000403	, L0000404	, L0000405	, L0000406	, L0000407	,
	L0000408	, L0000409	, L0000410	, L0000411	, L0000412	, L0000413	, L0000414	, L0000415	,
	L0000416	, L0000417	, L0000418	, L0000419	, L0000420	, L0000421	, L0000422	, L0000423	,
	L0000424	, L0000425	, L0000426	, L0000427	, L0000428	, L0000429	, L0000430	, L0000431	,
	L0000432	, L0000433	, L0000434	, L0000435	, L0000436	, L0000437	, L0000438	, L0000439	,
	L0000440	, L0000441	, L0000442	, L0000443	, L0000444	, L0000445	, L0000446	, L0000447	,
	L0000448	, L0000449	, L0000450	, L0000451	, L0000452	, L0000453	, L0000454	, L0000455	,
	L0000456	, L0000457	, L0000458	, L0000459	, L0000460	, L0000461	, L0000462	, L0000463	,
	L0000464	, L0000465	, L0000466	, L0000467	, L0000468	, L0000469	, L0000470	, L0000471	,
	L0000472	, L0000473	, L0000474	, L0000475	, L0000476	, L0000477	, L0000478	, L0000479	,
	L0000480	, L0000481	, L0000482	, L0000483	, L0000484	, L0000485	, L0000486	, L0000487	,

## Model Output - School Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus   ***   ***   21:43:44
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\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID -----	URBAN POP -----	SOURCE IDs -----
L0000488	,	L0000489 , L0000490 , L0000491 , L0000492 , L0000493 , L0000494 , L0000495 ,
L0000496	,	L0000497 , L0000498 , L0000499 , L0000500 , L0000501 , L0000502 , L0000503 ,
L0000504	,	L0000505 , L0000506 , L0000507 , L0000508 , L0000509 , L0000510 , L0000511 ,
L0000512	,	L0000513 , L0000514 , L0000515 , L0000516 , L0000517 , L0000518 , L0000519 ,
L0000520	,	L0000521 , L0000522 , L0000523 , L0000524 , L0000525 , L0000526 , L0000527 ,
L0000528	,	L0000529 , L0000530 , L0000531 , L0000532 , L0000533 , L0000534 , L0000535 ,
L0000536	,	L0000537 , L0000538 , PAREA2 , PAREA3 , PAREA4 , PAREA5 ,

# Model Output - School Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***   01/26/22
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) \*

SOURCE ID = PAREA1 through PAREA5 ; SOURCE TYPE = AREAPOLY :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus   ***   21:43:44
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) \*

SOURCE ID = L0000329 thru L0000538 ; SOURCE TYPE = VOLUME :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00









## Model Output - School Receptors Unit Emission Rates (1 g/s)

447721.81	3778157.23	0.10304	447741.81	3778157.23	0.10098
447761.81	3778157.23	0.09920	447781.81	3778157.23	0.09776
447801.81	3778157.23	0.09640	447821.81	3778157.23	0.09501

\*\*\* AERMOD - VERSION 21112 \*\*\*      \*\*\* Construction HRA\_Banyan Elementary School      \*\*\*      01/26/22  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\* Rancho Cucamonga Campus      \*\*\*      21:43:44  
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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION    VALUES FOR SOURCE GROUP: PHASE1    \*\*\*  
 INCLUDING SOURCE(S):    PAREA1    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF DPM                    IN MICROGRAMS/M\*\*3                    \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
447841.81	3778157.23	0.09349	447861.81	3778157.23	0.09178	
447881.81	3778157.23	0.08979	447901.81	3778157.23	0.08742	
447641.81	3778177.23	0.12209	Student MER	447661.81	3778177.23	0.11772
447681.81	3778177.23	0.11409	447701.81	3778177.23	0.11114	
447721.81	3778177.23	0.10878	447741.81	3778177.23	0.10678	
447761.81	3778177.23	0.10507	447781.81	3778177.23	0.10373	
447801.81	3778177.23	0.10237	447821.81	3778177.23	0.10092	
447841.81	3778177.23	0.09940	447861.81	3778177.23	0.09761	
447881.81	3778177.23	0.09551	447901.81	3778177.23	0.09303	

# Model Output - School Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus   ***   21:43:44
*** MODELOPTs:   NonDEFAULT   CONC   FLAT and   ELEV   FLGPOL   URBAN   ADJ_U*   ***   PAGE 234
  
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*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: SLINE1   ***
      INCLUDING SOURCE(S):   L0000329   ,   L0000330   ,   L0000331   ,   L0000332   ,   L0000333   ,
L0000334   ,   L0000335   ,   L0000336   ,   L0000337   ,   L0000338   ,   L0000339   ,   L0000340   ,   L0000341   ,
L0000342   ,   L0000343   ,   L0000344   ,   L0000345   ,   L0000346   ,   L0000347   ,   L0000348   ,   L0000349   ,
L0000350   ,   L0000351   ,   L0000352   ,   L0000353   ,   L0000354   ,   L0000355   ,   L0000356   ,   . . .   ,
  
```

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3			**		
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
447641.81	3778057.23	0.27565	447661.81	3778057.23	0.27597			
447681.81	3778057.23	0.27620	447701.81	3778057.23	0.27623			
447721.81	3778057.23	0.27582	447741.81	3778057.23	0.27525			
447761.81	3778057.23	0.27442	447781.81	3778057.23	0.27289			
447801.81	3778057.23	0.27134	447821.81	3778057.23	0.26965			
447841.81	3778057.23	0.26762	447861.81	3778057.23	0.26523			
447881.81	3778057.23	0.26242	447901.81	3778057.23	0.25913			
447641.81	3778077.23	0.33119	447661.81	3778077.23	0.33252			
447681.81	3778077.23	0.33369	447701.81	3778077.23	0.33455			
447721.81	3778077.23	0.33501	447741.81	3778077.23	0.33503			
447761.81	3778077.23	0.33450	447781.81	3778077.23	0.33278			
447801.81	3778077.23	0.33123	447821.81	3778077.23	0.32964			
447841.81	3778077.23	0.32763	447861.81	3778077.23	0.32517			
447881.81	3778077.23	0.32220	447901.81	3778077.23	0.31865			
447641.81	3778097.23	0.41073	447661.81	3778097.23	0.41398			
447681.81	3778097.23	0.41697	447701.81	3778097.23	0.41939			
447721.81	3778097.23	0.42108	447741.81	3778097.23	0.42200			
447761.81	3778097.23	0.42208	447781.81	3778097.23	0.42046			
447801.81	3778097.23	0.41909	447821.81	3778097.23	0.41773			
447841.81	3778097.23	0.41583	447861.81	3778097.23	0.41335			
447881.81	3778097.23	0.41025	447901.81	3778097.23	0.40644			
447641.81	3778117.23	0.53168	447661.81	3778117.23	0.53897			
447681.81	3778117.23	0.54576	447701.81	3778117.23	0.55141			
447721.81	3778117.23	0.55553	447741.81	3778117.23	0.55728			
447761.81	3778117.23	0.55738	447781.81	3778117.23	0.55725			
447801.81	3778117.23	0.55682	447821.81	3778117.23	0.55591			
447841.81	3778117.23	0.55424	447861.81	3778117.23	0.55182			
447881.81	3778117.23	0.54863	447901.81	3778117.23	0.54457			
447641.81	3778137.23	0.73319	447661.81	3778137.23	0.74992			
447681.81	3778137.23	0.76580	447701.81	3778137.23	0.77896			
447721.81	3778137.23	0.78837	447741.81	3778137.23	0.79181			
447761.81	3778137.23	0.79183	447781.81	3778137.23	0.79433			
447801.81	3778137.23	0.79552	447821.81	3778137.23	0.79549			
447841.81	3778137.23	0.79428	447861.81	3778137.23	0.79200			

## Model Output - School Receptors Unit Emission Rates (1 g/s)

447881.81	3778137.23	0.78855		447901.81	3778137.23	0.78289
447641.81	3778157.23	1.11836		447661.81	3778157.23	1.16151
447681.81	3778157.23	1.20396		447701.81	3778157.23	1.23883
447721.81	3778157.23	1.26156		447741.81	3778157.23	1.26854
447761.81	3778157.23	1.26787		447781.81	3778157.23	1.27460
447801.81	3778157.23	1.27894		447821.81	3778157.23	1.28116
*** AERMOD - VERSION 21112 ***		*** Construction HRA_Banyan Elementary School				***
*** AERMET - VERSION 16216 ***		*** Rancho Cucamonga Campus				***

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE1 \*\*\*

INCLUDING SOURCE(S): L0000329 , L0000330 , L0000331 , L0000332 , L0000333 ,

L0000334	, L0000335	, L0000336	, L0000337	, L0000338	, L0000339	, L0000340	, L0000341	,
L0000342	, L0000343	, L0000344	, L0000345	, L0000346	, L0000347	, L0000348	, L0000349	,
L0000350	, L0000351	, L0000352	, L0000353	, L0000354	, L0000355	, L0000356	, . . .	,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF DPM IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
447841.81	3778157.23	1.28093	447861.81	3778157.23	1.27885
447881.81	3778157.23	1.27419	447901.81	3778157.23	1.25947
<b>447641.81</b>	<b>3778177.23</b>	<b>2.04633</b>	447661.81	3778177.23	2.18707
447681.81	3778177.23	2.33663	447701.81	3778177.23	2.46182
447721.81	3778177.23	2.52823	447741.81	3778177.23	2.53624
447761.81	3778177.23	2.52233	447781.81	3778177.23	2.54707
447801.81	3778177.23	2.54915	447821.81	3778177.23	2.53667
447841.81	3778177.23	2.54133	447861.81	3778177.23	2.53978
447881.81	3778177.23	2.53453	447901.81	3778177.23	2.51321

# Model Output - School Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus   ***   21:43:44
*** MODELPTS:   NonDEFAULT   CONC   FLAT and   ELEV   FLGPOL   URBAN   ADJ_U*   ***   PAGE 236
  
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*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: PHASE2   ***
INCLUDING SOURCE(S):   PAREA2   ,
  
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\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3			**
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
447641.81	3778057.23	0.06860	447661.81	3778057.23	0.06478	
447681.81	3778057.23	0.06115	447701.81	3778057.23	0.05771	
447721.81	3778057.23	0.05443	447741.81	3778057.23	0.05138	
447761.81	3778057.23	0.04852	447781.81	3778057.23	0.04580	
447801.81	3778057.23	0.04330	447821.81	3778057.23	0.04099	
447841.81	3778057.23	0.03884	447861.81	3778057.23	0.03684	
447881.81	3778057.23	0.03499	447901.81	3778057.23	0.03328	
447641.81	3778077.23	0.06925	447661.81	3778077.23	0.06531	
447681.81	3778077.23	0.06158	447701.81	3778077.23	0.05807	
447721.81	3778077.23	0.05476	447741.81	3778077.23	0.05167	
447761.81	3778077.23	0.04876	447781.81	3778077.23	0.04598	
447801.81	3778077.23	0.04344	447821.81	3778077.23	0.04112	
447841.81	3778077.23	0.03896	447861.81	3778077.23	0.03697	
447881.81	3778077.23	0.03512	447901.81	3778077.23	0.03341	
447641.81	3778097.23	0.06997	447661.81	3778097.23	0.06591	
447681.81	3778097.23	0.06209	447701.81	3778097.23	0.05849	
447721.81	3778097.23	0.05512	447741.81	3778097.23	0.05197	
447761.81	3778097.23	0.04902	447781.81	3778097.23	0.04621	
447801.81	3778097.23	0.04366	447821.81	3778097.23	0.04132	
447841.81	3778097.23	0.03916	447861.81	3778097.23	0.03716	
447881.81	3778097.23	0.03532	447901.81	3778097.23	0.03362	
447641.81	3778117.23	0.07072	447661.81	3778117.23	0.06654	
447681.81	3778117.23	0.06262	447701.81	3778117.23	0.05894	
447721.81	3778117.23	0.05551	447741.81	3778117.23	0.05227	
447761.81	3778117.23	0.04925	447781.81	3778117.23	0.04647	
447801.81	3778117.23	0.04392	447821.81	3778117.23	0.04158	
447841.81	3778117.23	0.03941	447861.81	3778117.23	0.03741	
447881.81	3778117.23	0.03558	447901.81	3778117.23	0.03389	
447641.81	3778137.23	0.07149	447661.81	3778137.23	0.06720	
447681.81	3778137.23	0.06318	447701.81	3778137.23	0.05943	
447721.81	3778137.23	0.05594	447741.81	3778137.23	0.05263	
447761.81	3778137.23	0.04956	447781.81	3778137.23	0.04679	
447801.81	3778137.23	0.04424	447821.81	3778137.23	0.04189	
447841.81	3778137.23	0.03972	447861.81	3778137.23	0.03773	
447881.81	3778137.23	0.03590	447901.81	3778137.23	0.03420	
447641.81	3778157.23	0.07230	447661.81	3778157.23	0.06790	
447681.81	3778157.23	0.06379	447701.81	3778157.23	0.05997	

## Model Output - School Receptors Unit Emission Rates (1 g/s)

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447721.81  3778157.23  0.05643  447741.81  3778157.23  0.05308
447761.81  3778157.23  0.04997  447781.81  3778157.23  0.04719
447801.81  3778157.23  0.04463  447821.81  3778157.23  0.04228
*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus ***   21:43:44
*** MODELOPTs:  NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*   PAGE 237

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\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PHASE2 \*\*\*  
 INCLUDING SOURCE(S): PAREA2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3			**
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
447841.81	3778157.23	0.04011	447861.81	3778157.23	0.03813	
447881.81	3778157.23	0.03630	447901.81	3778157.23	0.03458	
447641.81	3778177.23	0.07316	447661.81	3778177.23	0.06866	
447681.81	3778177.23	0.06447	447701.81	3778177.23	0.06058	
447721.81	3778177.23	0.05699	447741.81	3778177.23	0.05361	
447761.81	3778177.23	0.05047	447781.81	3778177.23	0.04768	
447801.81	3778177.23	0.04508	447821.81	3778177.23	0.04268	
447841.81	3778177.23	0.04053	447861.81	3778177.23	0.03856	
447881.81	3778177.23	0.03675	447901.81	3778177.23	0.03509	

Model Output - School Receptors  
Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*      \*\*\* Construction HRA\_Banyan Elementary School      \*\*\*      01/26/22  
\*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\* Rancho Cucamonga Campus      \*\*\*      21:43:44  
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\*\*\* MODELOPTs:      NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION    VALUES FOR SOURCE GROUP: PHASE3    \*\*\*  
INCLUDING SOURCE(S):      PAREA3      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM      IN MICROGRAMS/M**3      **					
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
447641.81	3778057.23	0.08876	447661.81	3778057.23	0.08483
447681.81	3778057.23	0.08099	447701.81	3778057.23	0.07725
447721.81	3778057.23	0.07358	447741.81	3778057.23	0.07008
447761.81	3778057.23	0.06673	447781.81	3778057.23	0.06346
447801.81	3778057.23	0.06039	447821.81	3778057.23	0.05750
447841.81	3778057.23	0.05476	447861.81	3778057.23	0.05218
447881.81	3778057.23	0.04975	447901.81	3778057.23	0.04747
447641.81	3778077.23	0.09204	447661.81	3778077.23	0.08790
447681.81	3778077.23	0.08385	447701.81	3778077.23	0.07992
447721.81	3778077.23	0.07612	447741.81	3778077.23	0.07246
447761.81	3778077.23	0.06893	447781.81	3778077.23	0.06548
447801.81	3778077.23	0.06227	447821.81	3778077.23	0.05925
447841.81	3778077.23	0.05640	447861.81	3778077.23	0.05373
447881.81	3778077.23	0.05121	447901.81	3778077.23	0.04886
447641.81	3778097.23	0.09584	447661.81	3778097.23	0.09145
447681.81	3778097.23	0.08717	447701.81	3778097.23	0.08300
447721.81	3778097.23	0.07899	447741.81	3778097.23	0.07512
447761.81	3778097.23	0.07141	447781.81	3778097.23	0.06778
447801.81	3778097.23	0.06441	447821.81	3778097.23	0.06126
447841.81	3778097.23	0.05829	447861.81	3778097.23	0.05550
447881.81	3778097.23	0.05289	447901.81	3778097.23	0.05045
447641.81	3778117.23	0.10016	447661.81	3778117.23	0.09547
447681.81	3778117.23	0.09091	447701.81	3778117.23	0.08648
447721.81	3778117.23	0.08220	447741.81	3778117.23	0.07805
447761.81	3778117.23	0.07407	447781.81	3778117.23	0.07033
447801.81	3778117.23	0.06681	447821.81	3778117.23	0.06350
447841.81	3778117.23	0.06039	447861.81	3778117.23	0.05748
447881.81	3778117.23	0.05476	447901.81	3778117.23	0.05222
447641.81	3778137.23	0.10506	447661.81	3778137.23	0.10003
447681.81	3778137.23	0.09512	447701.81	3778137.23	0.09038
447721.81	3778137.23	0.08582	447741.81	3778137.23	0.08137
447761.81	3778137.23	0.07710	447781.81	3778137.23	0.07318
447801.81	3778137.23	0.06948	447821.81	3778137.23	0.06600
447841.81	3778137.23	0.06274	447861.81	3778137.23	0.05968
447881.81	3778137.23	0.05684	447901.81	3778137.23	0.05416
447641.81	3778157.23	0.11063	447661.81	3778157.23	0.10517
447681.81	3778157.23	0.09987	447701.81	3778157.23	0.09476



## Model Output - School Receptors Unit Emission Rates (1 g/s)

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447721.81  3778157.23  0.08986  447741.81  3778157.23  0.08509
447761.81  3778157.23  0.08055  447781.81  3778157.23  0.07638
447801.81  3778157.23  0.07245  447821.81  3778157.23  0.06876
*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School   ***
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus   ***
*** MODELOPTs:  NonDEFAULT  CONC  FLAT and  ELEV  FLGPOL  URBAN  ADJ_U*

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\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PHASE3 \*\*\*  
 INCLUDING SOURCE(S): PAREA3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3		
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
447841.81	3778157.23	0.06532	447861.81	3778157.23	0.06212
447881.81	3778157.23	0.05912	447901.81	3778157.23	0.05627
447641.81	3778177.23	0.11692	447661.81	3778177.23	0.11095
447681.81	3778177.23	0.10519	447701.81	3778177.23	0.09966
447721.81	3778177.23	0.09437	447741.81	3778177.23	0.08924
447761.81	3778177.23	0.08436	447781.81	3778177.23	0.07991
447801.81	3778177.23	0.07568	447821.81	3778177.23	0.07171
447841.81	3778177.23	0.06809	447861.81	3778177.23	0.06471
447881.81	3778177.23	0.06158	447901.81	3778177.23	0.05865

# Model Output - School Receptors Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***    *** Construction HRA_Banyan Elementary School    ***    01/26/22
*** AERMET - VERSION 16216 ***    *** Rancho Cucamonga Campus    ***    21:43:44
*** MODELPTs:    NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*    ***    PAGE 240
  
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*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PHASE4 ***
INCLUDING SOURCE(S):    PAREA4    ,
  
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\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3			**
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
447641.81	3778057.23	0.13153	447661.81	3778057.23	0.12492	
447681.81	3778057.23	0.11834	447701.81	3778057.23	0.11186	
447721.81	3778057.23	0.10547	447741.81	3778057.23	0.09935	
447761.81	3778057.23	0.09348	447781.81	3778057.23	0.08778	
447801.81	3778057.23	0.08246	447821.81	3778057.23	0.07749	
447841.81	3778057.23	0.07283	447861.81	3778057.23	0.06848	
447881.81	3778057.23	0.06443	447901.81	3778057.23	0.06068	
447641.81	3778077.23	0.13669	447661.81	3778077.23	0.12951	
447681.81	3778077.23	0.12241	447701.81	3778077.23	0.11545	
447721.81	3778077.23	0.10869	447741.81	3778077.23	0.10220	
447761.81	3778077.23	0.09597	447781.81	3778077.23	0.08991	
447801.81	3778077.23	0.08432	447821.81	3778077.23	0.07914	
447841.81	3778077.23	0.07431	447861.81	3778077.23	0.06981	
447881.81	3778077.23	0.06564	447901.81	3778077.23	0.06179	
447641.81	3778097.23	0.14240	447661.81	3778097.23	0.13458	
447681.81	3778097.23	0.12688	447701.81	3778097.23	0.11938	
447721.81	3778097.23	0.11215	447741.81	3778097.23	0.10523	
447761.81	3778097.23	0.09863	447781.81	3778097.23	0.09226	
447801.81	3778097.23	0.08640	447821.81	3778097.23	0.08099	
447841.81	3778097.23	0.07597	447861.81	3778097.23	0.07132	
447881.81	3778097.23	0.06703	447901.81	3778097.23	0.06309	
447641.81	3778117.23	0.14856	447661.81	3778117.23	0.14002	
447681.81	3778117.23	0.13166	447701.81	3778117.23	0.12358	
447721.81	3778117.23	0.11583	447741.81	3778117.23	0.10837	
447761.81	3778117.23	0.10128	447781.81	3778117.23	0.09471	
447801.81	3778117.23	0.08862	447821.81	3778117.23	0.08299	
447841.81	3778117.23	0.07778	447861.81	3778117.23	0.07298	
447881.81	3778117.23	0.06857	447901.81	3778117.23	0.06452	
447641.81	3778137.23	0.15519	447661.81	3778137.23	0.14585	
447681.81	3778137.23	0.13677	447701.81	3778137.23	0.12805	
447721.81	3778137.23	0.11975	447741.81	3778137.23	0.11175	
447761.81	3778137.23	0.10421	447781.81	3778137.23	0.09737	
447801.81	3778137.23	0.09102	447821.81	3778137.23	0.08516	
447841.81	3778137.23	0.07976	447861.81	3778137.23	0.07480	
447881.81	3778137.23	0.07026	447901.81	3778137.23	0.06608	
447641.81	3778157.23	0.16230	447661.81	3778157.23	0.15207	
447681.81	3778157.23	0.14222	447701.81	3778157.23	0.13281	

## Model Output - School Receptors Unit Emission Rates (1 g/s)

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447721.81  3778157.23  0.12391  447741.81  3778157.23  0.11541
447761.81  3778157.23  0.10744  447781.81  3778157.23  0.10025
447801.81  3778157.23  0.09361  447821.81  3778157.23  0.08751
*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus ***   21:43:44
*** MODELOPTs:  NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*   PAGE 241

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\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PHASE4 \*\*\*  
 INCLUDING SOURCE(S): PAREA4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3			**		
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
447841.81	3778157.23	0.08192	447861.81	3778157.23	0.07681			
447881.81	3778157.23	0.07214	447901.81	3778157.23	0.06780			
447641.81	3778177.23	0.16990	447661.81	3778177.23	0.15870			
447681.81	3778177.23	0.14799	447701.81	3778177.23	0.13785			
447721.81	3778177.23	0.12834	447741.81	3778177.23	0.11930			
447761.81	3778177.23	0.11089	447781.81	3778177.23	0.10334			
447801.81	3778177.23	0.09634	447821.81	3778177.23	0.08991			
447841.81	3778177.23	0.08415	447861.81	3778177.23	0.07891			
447881.81	3778177.23	0.07416	447901.81	3778177.23	0.06981			



## Model Output - School Receptors Unit Emission Rates (1 g/s)

```

447721.81  3778157.23  0.65881  447741.81  3778157.23  0.68214
447761.81  3778157.23  0.69408  447781.81  3778157.23  0.69493
447801.81  3778157.23  0.68346  447821.81  3778157.23  0.65928
*** AERMOD - VERSION 21112 ***   *** Construction HRA_Banyan Elementary School ***   01/26/22
*** AERMET - VERSION 16216 ***   *** Rancho Cucamonga Campus ***   21:43:44
*** MODELOPTs:  NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*   PAGE 243

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\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PHASE5 \*\*\*  
 INCLUDING SOURCE(S): PAREAS ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF DPM			IN MICROGRAMS/M**3		
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
447841.81	3778157.23	0.62308	447861.81	3778157.23	0.57748
447881.81	3778157.23	0.52669	447901.81	3778157.23	0.47475
447641.81	3778177.23	0.55168	447661.81	3778177.23	0.62417
447681.81	3778177.23	0.69530	447701.81	3778177.23	0.75662
447721.81	3778177.23	0.80439	447741.81	3778177.23	0.83734
447761.81	3778177.23	0.85551	447781.81	3778177.23	0.85923
447801.81	3778177.23	0.84648	447821.81	3778177.23	0.81600
447841.81	3778177.23	0.76802	447861.81	3778177.23	0.70561
447881.81	3778177.23	0.63627	447901.81	3778177.23	0.56751

## Model Output - School Receptors Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*      \*\*\* Construction HRA\_Banyan Elementary School      \*\*\*      01/26/22  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\* Rancho Cucamonga Campus      \*\*\*      21:43:44  
 \*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*      \*\*\*      PAGE 246

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF DPM                    IN MICROGRAMS/M\*\*3                    \*\*

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF	TYPE	NETWORK GRID-ID
<b>Maximum Exposed Student Receptor</b>						
PHASE1	1ST HIGHEST VALUE IS	0.12209	AT ( 447641.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	0.11772	AT ( 447661.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	0.11571	AT ( 447641.81, 3778157.23,	494.03,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	0.11409	AT ( 447681.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	5TH HIGHEST VALUE IS	0.11168	AT ( 447661.81, 3778157.23,	494.03,	2699.00,	0.00) DC
	6TH HIGHEST VALUE IS	0.11114	AT ( 447701.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	7TH HIGHEST VALUE IS	0.11009	AT ( 447641.81, 3778137.23,	492.70,	2699.00,	0.00) DC
	8TH HIGHEST VALUE IS	0.10878	AT ( 447721.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	9TH HIGHEST VALUE IS	0.10825	AT ( 447681.81, 3778157.23,	494.03,	2699.00,	0.00) DC
	10TH HIGHEST VALUE IS	0.10678	AT ( 447741.81, 3778177.23,	494.95,	2699.00,	0.00) DC
SLINE1	1ST HIGHEST VALUE IS	2.54915	AT ( 447801.81, 3778177.23,	494.08,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	2.54707	AT ( 447781.81, 3778177.23,	494.36,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	2.54133	AT ( 447841.81, 3778177.23,	493.68,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	2.53978	AT ( 447861.81, 3778177.23,	493.68,	2699.00,	0.00) DC
	5TH HIGHEST VALUE IS	2.53667	AT ( 447821.81, 3778177.23,	493.68,	2699.00,	0.00) DC
	6TH HIGHEST VALUE IS	2.53624	AT ( 447741.81, 3778177.23,	494.95,	2699.00,	0.00) DC
	7TH HIGHEST VALUE IS	2.53453	AT ( 447881.81, 3778177.23,	493.66,	2699.00,	0.00) DC
	8TH HIGHEST VALUE IS	2.52823	AT ( 447721.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	9TH HIGHEST VALUE IS	2.52233	AT ( 447761.81, 3778177.23,	494.36,	2699.00,	0.00) DC
	10TH HIGHEST VALUE IS	2.51321	AT ( 447901.81, 3778177.23,	493.44,	2699.00,	0.00) DC
PHASE2	1ST HIGHEST VALUE IS	0.07316	AT ( 447641.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	0.07230	AT ( 447641.81, 3778157.23,	494.03,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	0.07149	AT ( 447641.81, 3778137.23,	492.70,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	0.07072	AT ( 447641.81, 3778117.23,	491.36,	2699.00,	0.00) DC
	5TH HIGHEST VALUE IS	0.06997	AT ( 447641.81, 3778097.23,	490.03,	2699.00,	0.00) DC
	6TH HIGHEST VALUE IS	0.06925	AT ( 447641.81, 3778077.23,	488.70,	2699.00,	0.00) DC
	7TH HIGHEST VALUE IS	0.06866	AT ( 447661.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	8TH HIGHEST VALUE IS	0.06860	AT ( 447641.81, 3778057.23,	487.68,	2699.00,	0.00) DC
	9TH HIGHEST VALUE IS	0.06790	AT ( 447661.81, 3778157.23,	494.03,	2699.00,	0.00) DC
	10TH HIGHEST VALUE IS	0.06720	AT ( 447661.81, 3778137.23,	492.70,	2699.00,	0.00) DC
PHASE3	1ST HIGHEST VALUE IS	0.11692	AT ( 447641.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	2ND HIGHEST VALUE IS	0.11095	AT ( 447661.81, 3778177.23,	495.36,	2699.00,	0.00) DC
	3RD HIGHEST VALUE IS	0.11063	AT ( 447641.81, 3778157.23,	494.03,	2699.00,	0.00) DC
	4TH HIGHEST VALUE IS	0.10519	AT ( 447681.81, 3778177.23,	495.36,	2699.00,	0.00) DC

## Model Output - School Receptors Unit Emission Rates (1 g/s)

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5TH HIGHEST VALUE IS      0.10517 AT ( 447661.81, 3778157.23, 494.03, 2699.00, 0.00) DC
6TH HIGHEST VALUE IS      0.10506 AT ( 447641.81, 3778137.23, 492.70, 2699.00, 0.00) DC
7TH HIGHEST VALUE IS      0.10016 AT ( 447641.81, 3778117.23, 491.36, 2699.00, 0.00) DC
8TH HIGHEST VALUE IS      0.10003 AT ( 447661.81, 3778137.23, 492.70, 2699.00, 0.00) DC
9TH HIGHEST VALUE IS      0.09987 AT ( 447681.81, 3778157.23, 494.03, 2699.00, 0.00) DC
10TH HIGHEST VALUE IS     0.09966 AT ( 447701.81, 3778177.23, 495.36, 2699.00, 0.00) DC
*** AERMOD - VERSION 21112 *** *** Construction HRA_Banyan Elementary School ***
*** AERMET - VERSION 16216 *** *** Rancho Cucamonga Campus ***
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FLGPOL URBAN ADJ_U*

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\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF DPM            IN MICROGRAMS/M\*\*3            \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
PHASE4	1ST HIGHEST VALUE IS	0.16990 AT ( 447641.81, 3778177.23,	495.36, 2699.00, 0.00)	DC
	2ND HIGHEST VALUE IS	0.16230 AT ( 447641.81, 3778157.23,	494.03, 2699.00, 0.00)	DC
	3RD HIGHEST VALUE IS	0.15870 AT ( 447661.81, 3778177.23,	495.36, 2699.00, 0.00)	DC
	4TH HIGHEST VALUE IS	0.15519 AT ( 447641.81, 3778137.23,	492.70, 2699.00, 0.00)	DC
	5TH HIGHEST VALUE IS	0.15207 AT ( 447661.81, 3778157.23,	494.03, 2699.00, 0.00)	DC
	6TH HIGHEST VALUE IS	0.14856 AT ( 447641.81, 3778117.23,	491.36, 2699.00, 0.00)	DC
	7TH HIGHEST VALUE IS	0.14799 AT ( 447681.81, 3778177.23,	495.36, 2699.00, 0.00)	DC
	8TH HIGHEST VALUE IS	0.14585 AT ( 447661.81, 3778137.23,	492.70, 2699.00, 0.00)	DC
	9TH HIGHEST VALUE IS	0.14240 AT ( 447641.81, 3778097.23,	490.03, 2699.00, 0.00)	DC
	10TH HIGHEST VALUE IS	0.14222 AT ( 447681.81, 3778157.23,	494.03, 2699.00, 0.00)	DC
PHASE5	1ST HIGHEST VALUE IS	0.85923 AT ( 447781.81, 3778177.23,	494.36, 2699.00, 0.00)	DC
	2ND HIGHEST VALUE IS	0.85551 AT ( 447761.81, 3778177.23,	494.36, 2699.00, 0.00)	DC
	3RD HIGHEST VALUE IS	0.84648 AT ( 447801.81, 3778177.23,	494.08, 2699.00, 0.00)	DC
	4TH HIGHEST VALUE IS	0.83734 AT ( 447741.81, 3778177.23,	494.95, 2699.00, 0.00)	DC
	5TH HIGHEST VALUE IS	0.81600 AT ( 447821.81, 3778177.23,	493.68, 2699.00, 0.00)	DC
	6TH HIGHEST VALUE IS	0.80439 AT ( 447721.81, 3778177.23,	495.36, 2699.00, 0.00)	DC
	7TH HIGHEST VALUE IS	0.76802 AT ( 447841.81, 3778177.23,	493.68, 2699.00, 0.00)	DC
	8TH HIGHEST VALUE IS	0.75662 AT ( 447701.81, 3778177.23,	495.36, 2699.00, 0.00)	DC
	9TH HIGHEST VALUE IS	0.70561 AT ( 447861.81, 3778177.23,	493.68, 2699.00, 0.00)	DC
	10TH HIGHEST VALUE IS	0.69530 AT ( 447681.81, 3778177.23,	495.36, 2699.00, 0.00)	DC

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*** RECEPTOR TYPES: GC = GRIDCART
                       GP = GRIDPOLR
                       DC = DISCCART
                       DP = DISCPOLR

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Model Output - School Receptors  
Unit Emission Rates (1 g/s)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* Construction HRA\_Banyan Elementary School  
\*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\* Rancho Cucamonga Campus

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\*\*\* MODELOPTs:    NonDEFAULT    CONC    FLAT and    ELEV    FLGPOL    URBAN    ADJ\_U\*

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of                    0 Fatal Error Message(s)  
A Total of                    2 Warning Message(s)  
A Total of                    956 Informational Message(s)  
  
A Total of                    43848 Hours Were Processed  
  
A Total of                    49 Calm Hours Identified  
  
A Total of                    907 Missing Hours Identified ( 2.07 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186    3367            MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used                    0.50  
ME W187    3367            MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*



# Appendix C. Construction Risk Calculations

**Table C1**  
**Residential Concentrations for Construction Risk Calculations**

Contaminant ( a )	Source ( b )	Model Output <sup>1</sup> ( $\mu\text{g}/\text{m}^3$ ) ( c )	Emission Rates <sup>2</sup> (g/s) ( d )	MEIR Conc. ( $\mu\text{g}/\text{m}^3$ ) ( e )	Total MEIR Conc. Annual Average ( $\mu\text{g}/\text{m}^3$ ) ( f )	
<b>Residential Receptors</b>						
DPM	2026	Phase 1 On-Site	2.41	1.01E-02	2.44E-02	2.45E-02
		Phase 1 Truck Route	0.15	6.58E-05	9.62E-06	
	2027	Phase 1 On-Site	2.41	6.98E-03	1.68E-02	1.69E-02
		Phase 1 Truck Route	0.15	5.69E-05	8.33E-06	
	2030	Phase 2 On-Site	0.13	2.30E-03	3.03E-04	3.06E-04
		Phase 2 Truck Route	0.15	1.76E-05	2.58E-06	
	2031	Phase 2 On-Site	0.13	1.93E-03	2.54E-04	2.56E-04
		Phase 2 Truck Route	0.15	1.16E-05	1.70E-06	
	2038	Phase 3 On-Site	0.20	7.02E-04	1.44E-04	1.46E-04
		Phase 3 Truck Route	0.15	1.23E-05	1.80E-06	
	2042	Phase 4 On-Site	0.34	2.98E-04	1.01E-04	1.02E-04
		Phase 4 Truck Route	0.15	5.28E-06	7.73E-07	
	2049	Phase 5 On-Site	1.27	3.85E-03	4.87E-03	4.87E-03
		Phase 5 Truck Route	0.15	3.50E-05	5.12E-06	
	2050	Phase 5 On-Site	1.27	1.13E-03	1.43E-03	1.43E-03
		Phase 5 Truck Route	0.15	1.01E-05	1.47E-06	
Total DPM concentrations used for Cancer Risk and Chronic Hazard calculations						

Maximum Exposed Individual Resident (MEIR) UTM coordinates: 447913.02E, 3778635.85N

<sup>1</sup> Model Output (Appendix B) at the MEIR based on unit emission rates for sources (1 g/s).

<sup>2</sup> Emission Rates from Emission Rate Calculations (Appendix A - Construction Emissions).

**Table C2**  
**Quantification of Health Risks for Off-site Residents**  
**Construction Emissions**

Source (a)	MEIR Conc. (µg/m <sup>3</sup> ) (b)	Weight Fraction (c)	Contaminant (d)	URF (µg/m <sup>3</sup> ) <sup>-1</sup> (e)	CPF (mg/kg/day) <sup>-1</sup> (f)	Dose (by age bin)					Carcinogenic Risks (by age bin)					Total Cancer Risk per million (r)	Chronic Hazards <sup>3</sup>						
						3rd Trimester (mg/kg-day) (g)	0 < 2 years (mg/kg-day) (h)	2 < 9 years (mg/kg-day) (i)	2<16 years (mg/kg-day) (j)	16<30 years (mg/kg-day) (k)	3rd Trimester per million (m)	0 < 2 years per million (n)	2 < 9 years per million (o)	2<16 years per million (p)	16<30 years per million (q)		Chronic REL (µg/m <sup>3</sup> ) (s)	RESP (t)					
<b>Residential Receptors</b>																							
2026	Phase 1	2.45E-02	1.00E+00	DPM	3.0E-04	1.1E+00	8.47E-06	2.56E-05				2.70E-01	2.44E+00				2.71E+00	5.0E+00	4.89E-03				
2027	Phase 1	1.69E-02	1.00E+00							1.76E-05					1.20E+00						1.20E+00		3.37E-03
2030	Phase 2	3.06E-04	1.00E+00									2.52E-07					3.41E-03						6.11E-05
2031	Phase 2	2.56E-04	1.00E+00									2.11E-07					3.60E-03						5.12E-05
2038	Phase 3	1.46E-04	1.00E+00									1.04E-07					1.46E-03						2.91E-05
2042	Phase 4	1.02E-04	1.00E+00									7.30E-08					5.91E-04						2.04E-05
2049	Phase 5	4.87E-03	1.00E+00										1.56E-06								7.22E-03		9.74E-04
2050	Phase 5	1.43E-03	1.00E+00										4.60E-07								2.63E-03		2.86E-04
															<b>Total</b>	<b>3.93</b>				<b>0.010</b>			

Maximum Exposed Individual Resident (MEIR) UTM coordinates: 447913.02E, 3778635.85N

	OEHHA age bin exposure year(s)	3rd Trimester 2026	0 < 2 years 2026-2028	2 < 9 years 2028-2035	2<16 years 2035-2042	16<30 years 20-42-2050	exposure durations (year) <sup>2</sup>							
							Construction Year	3rd Trimester	0 < 2 years	2 < 9 years	9<16 years	16<30 years		
Dose Exposure Factors: requery (days/year)		350	350	350	350	350	2026	Phase 1	0.25	0.75				
inhalation rate (L/kg-day) <sup>1</sup>		361	1090	861	745	335	2027	Phase 1		0.53				
inhalation absorption factor		1	1	1	1	1	2030	Phase 2			0.42			
conversion factor (mg/µg; m <sup>3</sup> /L)		1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	2031	Phase 2			0.52			
							2038	Phase 3				0.43		
							2042	Phase 4				0.25	0.66	
							2049	Phase 5					0.42	
							2050	Phase 5					0.52	
Risk Calculation Factors: age sensitivity factor		10	10	3	3	1								
averaging time (years)		70	70	70	70	70								
per million		1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	4.76	0.25	1.28	0.94	0.68	1.61		
fraction of time at home		0.85	0.85	0.72	0.72	0.73								

<sup>1</sup> Inhalation rate taken as the 95th percentile breathing rates (OEHHA, 2015).

<sup>2</sup> Construction durations determined for each year to adjust receptor exposures to the exposure durations for each construction year (see App A - Construction Emissions).

<sup>3</sup> Chronic Hazards for DPM using the chronic reference exposure level (REL) for the Respiratory Toxicological Endpoint.

**Table C3**  
**Student Concentrations for Construction Risk Calculations**

Contaminant ( a )	Source ( b )	Model Output <sup>1</sup> ( $\mu\text{g}/\text{m}^3$ ) ( c )	Emission Rates <sup>2</sup> (g/s) ( d )	MER Conc. ( $\mu\text{g}/\text{m}^3$ ) ( e )	Total MER Conc. Annual Average ( $\mu\text{g}/\text{m}^3$ ) ( f )	
<b>Elementary School Student</b>						
DPM	2026	Phase 1 On-Site	0.12	1.01E-02	1.24E-03	1.37E-03
		Phase 1 Truck Route	2.05	6.58E-05	1.35E-04	
	2027	Phase 1 On-Site	0.12	6.98E-03	8.52E-04	9.69E-04
		Phase 1 Truck Route	2.05	5.69E-05	1.17E-04	
	2030	Phase 2 On-Site	0.07	2.30E-03	1.68E-04	2.04E-04
		Phase 2 Truck Route	2.05	1.76E-05	3.61E-05	
	2031	Phase 2 On-Site	0.07	1.93E-03	1.41E-04	1.65E-04
		Phase 2 Truck Route	2.05	1.16E-05	2.38E-05	
	2038	Phase 3 On-Site	0.12	7.02E-04	8.21E-05	1.07E-04
		Phase 3 Truck Route	2.05	1.23E-05	2.52E-05	
	2042	Phase 4 On-Site	0.17	2.98E-04	5.06E-05	6.14E-05
		Phase 4 Truck Route	2.05	5.28E-06	1.08E-05	
	2049	Phase 5 On-Site	0.55	3.85E-03	2.12E-03	2.19E-03
		Phase 5 Truck Route	2.05	3.50E-05	7.16E-05	
	2050	Phase 5 On-Site	0.55	1.13E-03	6.24E-04	6.44E-04
		Phase 5 Truck Route	2.05	1.01E-05	2.06E-05	
Total DPM concentrations used for Cancer Risk and Chronic Hazard calculations						

Maximum Exposed Receptor (MER) UTM coordinates: 447641.81E, 3778177.23N

<sup>1</sup> Model Output (Appendix C) at the MER based on unit emission rates for sources (1 g/s).

<sup>2</sup> Emission Rates from Emission Rate Calculations (Appendix A - Construction Emissions).

**Table C4  
Quantification of Health Risks for Off-site Student  
Construction Emissions**

Source (a)	MER Conc. ( $\mu\text{g}/\text{m}^3$ ) (b)	Weight Fraction (c)	Contaminant (d)	URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup> (e)	CPF ( $\text{mg}/\text{kg}/\text{day}$ ) <sup>-1</sup> (f)	Dose (by age bin)		Carcinogenic Risks (by age bin)		Total Cancer Risk per million (r)	Chronic Hazards <sup>3</sup>		
						2<16 years ( $\text{mg}/\text{kg}/\text{day}$ ) (j)	2<16 years ( $\text{mg}/\text{kg}/\text{day}$ ) (k)	2<16 years per million (p)	2<16 years per million (q)		Chronic REL ( $\mu\text{g}/\text{m}^3$ ) (s)	RESP (t)	
<b>Elementary School Student</b>													
2026	Phase 1	1.37E-03	1.00E+00	DPM	3.0E-04	1.1E+00	3.52E-07		1.58E-02		1.58E-02	5.0E+00	2.74E-04
2027	Phase 1	9.69E-04	1.00E+00				2.48E-07		5.95E-03		5.95E-03		1.94E-04
2030	Phase 2	2.04E-04	1.00E+00				5.24E-08		9.84E-04		9.84E-04		4.08E-05
2031	Phase 2	1.65E-04	1.00E+00				4.23E-08		9.99E-04		9.99E-04		3.30E-05
<b>Total</b>											<b>0.024</b>		<b>0.001</b>
2038	Phase 3	1.07E-04	1.00E+00				2.75E-08		5.33E-04		5.33E-04		2.15E-05
2042	Phase 4	6.14E-05	1.00E+00				1.57E-08		6.45E-04		6.45E-04		1.23E-05
2049	Phase 5	2.19E-03	1.00E+00				5.62E-07		1.07E-02		1.07E-02		4.39E-04
2050	Phase 5	6.44E-04	1.00E+00				1.65E-07		3.89E-03		3.89E-03		1.29E-04
<b>Total</b>											<b>0.016</b>		<b>0.001</b>

Maximum Exposed Receptor (MER) UTM coordinates: 447641.81E, 3778177.23N

Dose Exposure Factors:	OEHHA age bin exposure year(s)	2 < 16 years 2026-2032	exposure durations (year) <sup>2</sup>			
			Construction Year	2 < 16 years 2 < 16 years		
exposure frequency (days/year)		180	2026	Phase 1	1.00	
8-hour inhalation rate (L/kg-day) <sup>1</sup>		520	2027	Phase 1	0.53	
inhalation absorption factor		1	2030	Phase 2	0.42	
conversion factor ( $\text{mg}/\mu\text{g}; \text{m}^3/\text{L}$ )		1.0E-06	2031	Phase 2	0.52	
			2038	Phase 3		0.43
			2042	Phase 4		0.91
			2049	Phase 5		0.42
			2050	Phase 5		0.52
					<b>4.76</b>	2.48
						2.28

<sup>1</sup> Inhalation rate taken as the 8-hour 95th percentile breathing rates, Moderate Activity (OEHHA, 2015).

<sup>2</sup> Construction durations determined for each year to adjust receptor exposures to the exposure durations for each construction year (see App A - Construction Emissions).

<sup>3</sup> Chronic Hazards for DPM using the chronic reference exposure level (REL) for the Respiratory Toxicological Endpoint.

## **Appendix D      Biological Resources Technical Report**

## Appendices

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# Biological Resources Technical Report

## Rancho Cucamonga Campus Master Plan

*Chaffey Community College District, San Bernardino County, CA*

### DRAFT REPORT



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## INTRODUCTION

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The following biological resources technical report describes a detailed assessment of potential sensitive natural resources located within and/or immediately adjacent to the Chaffey College Master Plan study area (Study Area) located within the Rancho Cucamonga Campus (Project Site). The report has been prepared to support compliance with the California Environmental Quality Act (CEQA) documentation including the preparation of a Program Environmental Impact Report (PEIR), Master Plan and environmental review process conducted by the Chaffey College Governing Board, City of Rancho Cucamonga, and other responsible agencies. As discussed below, the assessment included a thorough literature review, site reconnaissance characterizing existing conditions (including floral, faunal and dominant vegetation communities), impact analysis, and development of proposed mitigation and avoidance measures to reduce impacts to a level of less than significant, as warranted.

### PROJECT LOCATION

The 163.32-acre Study Area is located within the 200-acre Chaffey Colleges' Rancho Cucamonga campus Project Site, 5885 Haven Avenue in the northern region of the City of Rancho Cucamonga, San Bernardino County, California, as shown in Figure 1, *Regional Location Map*. Specifically, the Study Area extends north of Banyan Street, east of Haven Avenue, south of Wilson Avenue, and southwest of the Chaffey College Rancho Cucamonga Campus Nature Preserve, as shown in Figure 2, *Project Site Map*.

### PROJECT DESCRIPTION

The proposed action includes the demolition, construction, and renovation of buildings and facilities, parking additions and improvements to circulation (excluding the nature preserve) in 5 phases over 30 years. Specifically, the proposed action includes demolition of approximately 127,000 sq./ft. of buildings and facilities, construction of 673,00 sq./ft., and renovation of 187,000 sq./ft. of buildings and facilities.

**Demolition:** As part of the Master Plan, 16 buildings are identified to be demolished and replaced with new modern buildings.

**New Construction:** Nine new buildings would replace older outdated buildings.

**Renovation:** Due to the age and condition of the existing buildings, the Facilities Master Plan emphasizes renovation and modernization of existing facilities. The goals of the renovations are to maximize functional space, eliminate nonfunctional space, and improve efficiency/utilization of existing facilities. Building renovations could include new energy-efficient lighting; ceilings; paint; flooring; casework; stairwells; and heating, ventilation, and air conditioning systems. In some cases, interior walls could be removed or modified.



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**Figure 1 - Regional Location Map**

*Biological Resources Technical Report  
 Chaffey College Rancho Cucamonga Campus Master Plan*

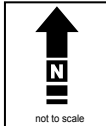


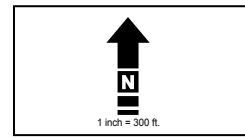




 Photo Point & Direction

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**Figure 2 - Project Site Map**  
 Biological Resources Technical Report  
 Chaffey College Rancho Cucamonga Campus Master Plan





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## METHODOLOGY

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The following section details the methods implemented prior and during the reconnaissance survey conducted throughout the Study Area.

### LITERATURE REVIEW

Existing biological resource conditions within and adjacent to the Study Area were initially investigated through review of pertinent scientific literature. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) were reviewed in conjunction with anticipated federally listed species potentially occurring within the Study Area. The California Natural Diversity Database (CNDDDB 2020a), a California Department of Fish and Wildlife (CDFW) Natural Heritage Division species account database, was also reviewed for all pertinent information regarding the locations of known occurrences of sensitive species in the vicinity of the property. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. Combined, the sources reviewed provided an excellent baseline from which to inventory the biological resources potentially occurring in the area. Other sources of information included the review of unpublished biological resource letter reports and assessments. Other CDFW reports and publications consulted include the following:

- Special Animals (CDFW 2020b);
- State/Federally Listed Endangered/Threatened Animals of State (CDFW 2020c);
- Endangered, Threatened, and Rare Plants of California (CDFW 2020d); and
- Special Vascular Plants and Bryophytes List (CDFW 2020e).

### FIELD SURVEY

A reconnaissance survey of the Study Area was conducted by Ruben Ramirez of Cadre Environmental (USFWS Permit 780566-14, CDFW Permit 02243) on January 13<sup>th</sup>, 2021 in order to characterize and identify potential sensitive plant and wildlife habitats, and to establish the accuracy of the data identified in the literature search. Geologic and soil maps were examined to identify local soil types that may support sensitive taxa. Aerial photograph, topographic maps, vegetation and rare plant maps prepared for previous studies in the region were used to determine community types and other physical features that may support sensitive plants/wildlife, uncommon taxa, or rare communities that occur within or adjacent to the Study Area. Habitat assessments were conducted for, but not limited to, the following target species/groups.

- Coastal California gnatcatcher – FT/SSC
- Least Bell’s vireo – FE/SE
- Burrowing owl - SSC
- Southwestern willow flycatcher – FE/SE
- San Bernardino kangaroo rat – FE/SSC
- Sensitive plants
- Protected trees (City of Rancho Cucamonga Municipal Code, Chapter 17, Tree Preservation – Chapter 17.80)

## **Vegetation Communities/Habitat Classification Mapping**

Natural community names and hierarchical structure follows the “*Manual of California Vegetation*” (Sayer and Keeler-Wolf 2009) classification system, which has been refined and augmented where appropriate to better characterize the habitat types observed onsite.

### **Floristic Plant Inventory**

A general plant survey was conducted throughout the Study Area during the reconnaissance in a collective effort to identify all species occurring onsite.

All plants observed during the survey efforts were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy follows Hickman (1993). Scientific nomenclature and common names used in this report generally follow Roberts et al. (2004) or Baldwin et al. (2012) for updated taxonomy. Scientific names are included only at the first mention of a species; thereafter, common names alone are used.

### **Wildlife Resources Inventory**

All animals identified during the reconnaissance survey by sight, call, tracks, scat, or other characteristic sign were recorded onto a 1:200 scale orthorectified color aerial photograph or documented using a global positioning system (GPS). In addition to species actually detected, expected use of the site by other wildlife was derived from the analysis of habitats on the site, combined with known habitat preferences of regionally occurring wildlife species.

Vertebrate taxonomy followed in this report is according to the Center for North American Herpetology (2021 for amphibians and reptiles), the American Ornithologists’ Union (1988 and supplemental) for birds, and Baker et al. (2003) for mammals. Both common and scientific names are used during the first mention of a species; common names only are used in the remainder of the text.

### **Regional Connectivity/Wildlife Movement Corridors**

The analysis of wildlife movement corridors associated with the Study Area and immediate vicinity is based on information compiled from literature, analysis of the aerial photograph and direct observations made in the field during the reconnaissance site visit.

A literature review was conducted that includes documents on island biogeography (studies of fragmented and isolated habitat “islands”), reports on wildlife home range sizes and migration patterns, and studies on wildlife dispersal. Wildlife movement studies conducted in southern California were also reviewed. Use of field-verified digital data, in conjunction with the GIS database, allowed proper identification of regional vegetation communities and drainage features. This information was crucial to assessing the relationship of the Study Area to large open space areas in the immediate vicinity and was also evaluated in terms of connectivity and habitat linkages. Relative to

corridor issues, the discussions in this report are intended to focus on wildlife movement associated within the Study Area and the immediate vicinity.

### Jurisdictional Resources Assessment

The Study Area was assessed for potential jurisdiction by the U.S. Army Corps of Engineers (USACE) pursuant to Clean Water Act (CWA) Section 404; wetland and non-wetland waters of the State subject to the regulatory jurisdiction of the Regional Water Quality Control Board (RWQCB) pursuant to CWA Section 401 and State Porter-Cologne Water Quality Control Act (Porter-Cologne); streambed and riparian habitat subject to the regulatory jurisdiction of the CDFW pursuant Sections 1600 *et seq.* of the California Fish and Game Code (CDFG Code). Non-wetland waters of the United States were assessed based on the limits of the Ordinary High-Water Mark (OHWM) as determined by erosion, the deposition of vegetation or debris, and changes in vegetation and soil characteristics. The assessment utilized the methodology for routine wetland determination according to the methods outlined in the USACE Wetland Delineation Manual (Environmental Laboratory 1987) and the Arid West Wetland Delineation Supplement and updated regulatory guidance letters (USACE 2008). Wetlands are identified by the presence of three characteristics: hydrophytic vegetation, wetland hydrology, and hydric soils. Specifically, the assessment of wetland hydrology was evaluated throughout the Study Area by recording the extent of observed surface flows, where applicable. In addition, indicators of wetland or riverine hydrology were recorded, including water marks, drift lines, rack, debris, and sediment deposits, as warranted.

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### EXISTING ENVIRONMENTAL SETTING

---

The 163.32-acre Study Area is dominated by developed/ornamental landscaping (Chaffey College Rancho Cucamonga Campus), coastal sage scrub, disturbed, mule fat scrub and open water vegetation communities as described in this report, and illustrated in Figure 3, *Vegetation Communities Map*, Figures 4 to 7, *Current Study Area Photographs*, and summarized in Table 1, *Study Area Vegetation Community Acreages*.

**Table 1.**  
**Study Area Vegetation Community Acreages**

<b>Vegetation Community</b>	<b>Acres</b>
Developed/Ornamental Landscaping	149.18
Coastal Sage Scrub	8.52
Disturbed	5.35
Open Water (Detention Basin)	0.23
Mule Fat Scrub	0.04
<b>TOTAL</b>	<b>163.32</b>

Source: Cadre Environmental 2021.



The Soil Survey of the San Bernardino County Area has the following soils mapped within the boundary of the Study Area as shown on Figure 8, *Soils Association Map*:

- SoC – Soboba gravelly loamy sand, 0 to 9 percent slopes.
- SpC – Soboba stony loamy sand, 2 to 9 percent slopes.

## VEGETATION COMMUNITIES

### Developed/Ornamental Landscaping

The majority of the Study Area is developed (Chaffey College Rancho Cucamonga Campus) and dominated by structures, roads, ornamental shrubs, trees and turf. Ornamental planted vegetation documented within the Study Area includes but is not limited to Peruvian peppertree (*Schinus molle*), magnolia (*Magnolia grandiflora*), Chinese elm (*Ulmus parvifolia*), bottlebrush (*Callistemon* sp.), Brazilian peppertree (*Schinus terebinthifolia*), pines (*Pinus* sp), coast redwood (*Sequoia sempervirens*), Brisbane box (*Lophostemon confertus*), oleander (*Nerium oleander*), Pampas grass (*Cortaderia selloana*), olive (*Olea europaea*), holly oak (*Quercus ilex*), Mexican fan palm (*Washingtonia robusta*), queen palm (*Syagrus romanzoffiana*), jacaranda (*Jacaranda mimosifolia*), lantana (*Lantana camara*), lowboy (*Acacia redolens*), western sycamore (*Platanus racemosa*), California ash (*Fraxinus dipetala*), eucalyptus (*Eucalyptus globulus*), and fountain grass (*Pennisetum setaceum*).

### Coastal Sage Scrub

Coastal sage scrub extends primarily adjacent to the southwestern Study Area boundary. This vegetation community represents a remnant of alluvial fan sage scrub habitat. However, necessary fluvial, periodic flooding and scouring required to sustain alluvial fan sage scrub no longer persists. This conclusion is supported by the dense canopy cover of this vegetation community, dominance of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*) and lack of scale-broom (*Lepidospartum squamatum*). Additional species documented within this vegetation community include thicketleaf yerba santa (*Eriodictyon crassifolium*), hollyleaf cherry (*Prunus ilicifolia*), chamise (*Adenostoma fasciculatum*), blue elderberry (*Sambucus cerulea*), pinebush (*Ericameria pinifolia*), and tobacco tree (*Nicotiana glauca*).

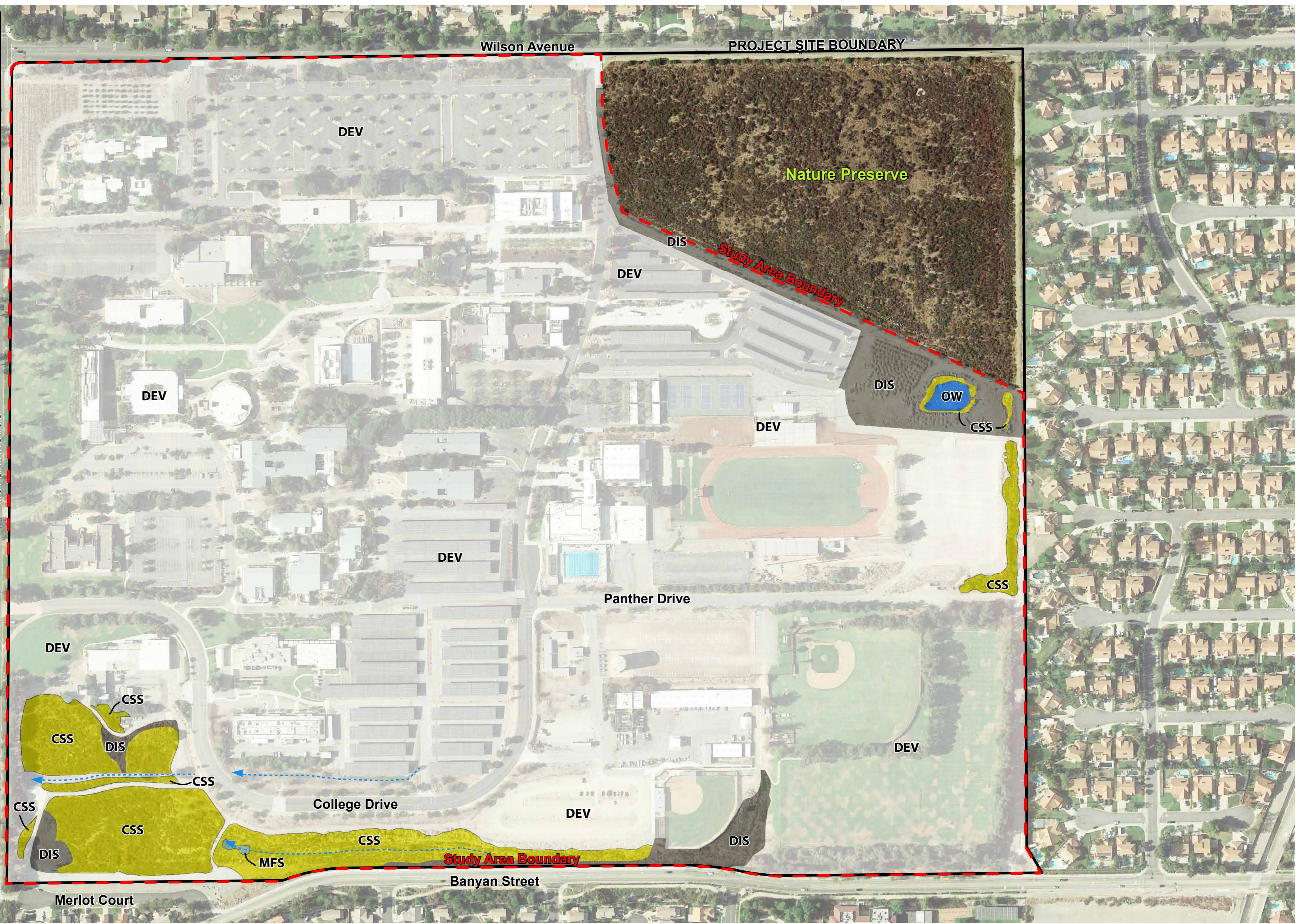
### Disturbed

Several regions of disturbed habitat occur within the Study Area. These areas are dominated by black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), red-stemmed filaree (*Erodium cicutarium*), white-stemmed filaree (*Erodium moschatum*), prickly lettuce (*Lactuca serriola*), Russian thistle (*Kali tragus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), telegraph weed (*Heterotheca grandiflora*), annual bursage (*Ambrosia acanthicarpa*), ripgut grass (*Bromus diandrus*), wild oat (*Avena fatua*), and tumbling pigweed (*Amaranthus albus*).



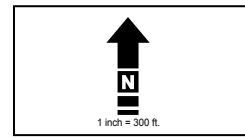
**Legend**

- DEV Developed (Ornamental Landscaping)
- CSS Coastal Sage Scrub
- DIS Disturbed
- MFS Mule Fat Scrub
- OW Open Water
- Drainage



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**Figure 3 - Vegetation Communities Map**  
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PHOTOGRAPH 1 - Northward view of Study Area along the eastern boundary. Small remnant patches of coastal sage scrub were documented within this region.



PHOTOGRAPH 2 - Northwest view of the Study Area from the southwest corner of the campus. The majority of the Study Area is developed with classrooms, support facilities, and athletic fields.

**Figure 4 - Current Study Area Photographs**

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Chaffey College Rancho Cucamonga Campus Master Plan*





PHOTOGRAPH 3 - Northward view of disturbed habitat located within the Study Area. These areas are dominated by non-native invasive and ruderal vegetation.

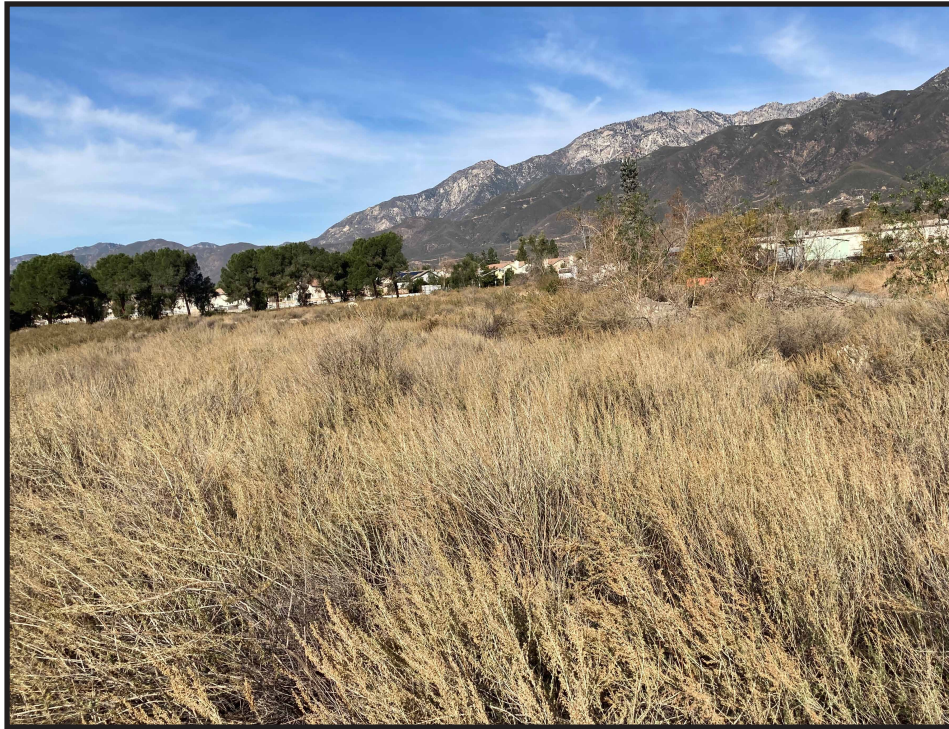


PHOTOGRAPH 4 - Westward view of the southwestern region of the Study Area adjacent to Banyan Street.

**Figure 5 - Current Study Area Photographs**

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PHOTOGRAPH 5 - Westward view of the southwestern region of the Study Area where thick mature coastal sage scrub vegetation is located.



PHOTOGRAPH 6 - Westward view of drainage feature that bisects the coastal sage scrub and drains offsite in the southwest corner to a basin located west of Haven Avenue.

**Figure 6 - Current Study Area Photographs**

*Biological Resources Technical Report  
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PHOTOGRAPH 7 - Eastward view of the Study Area from the northern region of the campus. The majority of the Study Area is developed with classrooms, support facilities, and athletic fields.

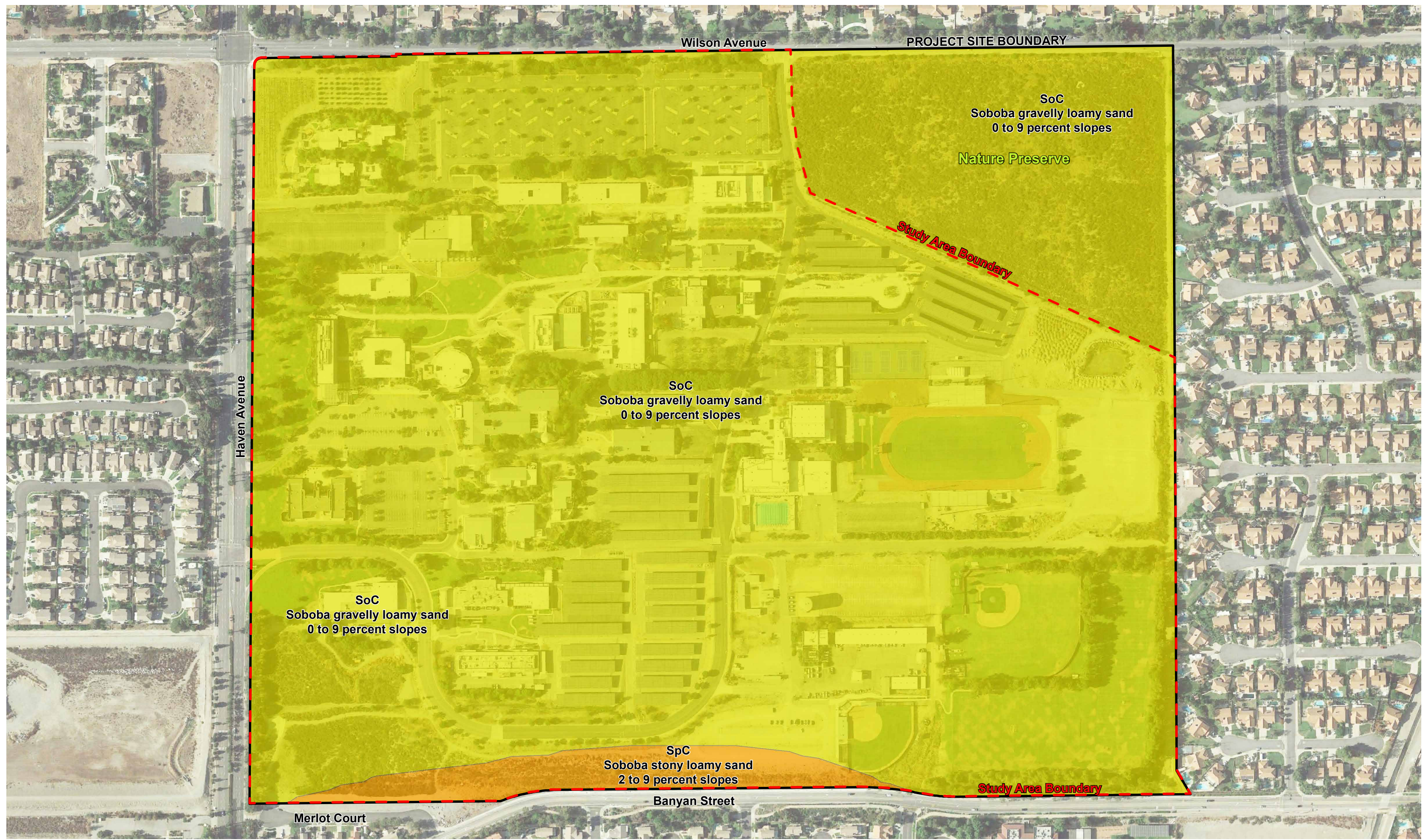


PHOTOGRAPH 8 - Southward view of the Study Area from the eastern region of the campus.

**Figure 7 - Current Study Area Photographs**

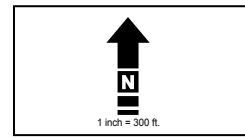
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**Figure 8 - Soils Association Map**  
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## **Mule Fat Scrub**

A single small distressed patch (0.04 acre) of mule fat scrub is located at the terminus of a drainage which extends through the coastal sage scrub in the southwestern region of the Study Area. This vegetation community is dominated by mule fat (*Baccharis salicifolia*).

## **Open Water**

A single inundated detention basin is located within the eastern region of the Study Area. This open water area is bordered by disturbed coastal sage scrub habitat.

## **GENERAL PLANT & WILDIFE SPECIES**

General plant species documented within the Study Area are presented in the previous section.

General wildlife species documented onsite or within the vicinity during the site assessment include but are not limited to red-tailed hawk (*Buteo jamaicensis*) mourning dove (*Zenaida macroura*), rock dove (*Columba livia*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), northern flicker (*Colaptes auratus*), western scrub jay (*Aphelocoma californica*), California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), wrenit (*Chamaea fasciata*), bushtit (*Psaltriparus minimus*), yellow rumped warbler (*Setophaga coronata*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), white-crowned sparrow (*Zonotrichia leucophrys*), lesser goldfinch (*Spinus psaltria*), Lawrence's goldfinch (*Spinus lawrencei*), house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and desert cottontail (*Sylvilagus audubonii*).

## **JURISDICTIONAL WETLAND RESOURCES**

A single wetland (open water) and potential jurisdictional resources (drainages in the southwestern region of Study Area) may be regulated by the USACE, CDFW, and/or RWQCB, as illustrated in Figure 3, *Vegetation Communities Map*.

Prior to issuance of grading or construction permits within phases potential directly or indirectly impacting wetlands or jurisdictional resources, the project applicant will conduct a formal jurisdictional delineation to determine the extent of resources onsite regulated by the USACE, CDFW, or RWQCB. The project applicant will also be required to obtain all applicable permits which may include, 404 Nationwide Permit from the USACE, 1602 Streambed Alteration Agreement from CDFW, and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260.

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## **SENSITIVE BIOLOGICAL RESOURCES**

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The following discussion describes the plant and wildlife species present, or potentially present within the property boundaries, that have been afforded special recognition by federal, state, or local resource conservation agencies and organizations, principally



due to the species' declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by state and/or federal resource management agencies, or both, as threatened or endangered, under provisions of the state and federal endangered species act. Vulnerable or "at-risk" species that are proposed for listing as threatened or endangered (and thereby for protected status) are categorized administratively as "candidates" by the USFWS. CDFW uses various terminology and classifications to describe vulnerable species. There are additional sensitive species classifications applicable in California. These are described below.

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, USFWS, and special groups like the California Native Plant Society (CNPS) maintain watch lists of such resources. For the purpose of this assessment sources used to determine the sensitive status of biological resources are:

**Plants:** USFWS (2020), CNDDDB (CDFW 2020a), CDFW (2020d, 2020e), CNPS (2020), and Skinner and Pavlik (1994),

**Wildlife:** California Wildlife Habitat Relationships (2008), USFWS (2020), CNDDDB (CDFW 2020a), and CDFW (2020b, 2020c).

**Habitats:** CNDDDB (CDFW 2020a, 2020f).

## FEDERAL PROTECTION AND CLASSIFICATIONS

The Federal Endangered Species Act of 1973 (FESA) defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range..." Threatened species are defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined as follows in Section 3(18) of the FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of a "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. Recently, the USFWS instituted changes in the listing status of former candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing at this time) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected.

However, some USFWS field offices have issued memoranda stating that former C2 species are henceforth to be considered Federal Species of Concern. This term is employed in this document but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For purposes of this assessment, the following acronyms are used for federal status species:

FE	Federal Endangered
FT	Federal Threatened
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
FC	Federal Candidate for Listing

The designation of critical habitat can also have a significant impact on the development of land designated as “*critical habitat*.” The FESA prohibits federal agencies from taking any action that will “*adversely modify or destroy*” critical habitat (16 U.S.C. § 1536(a)(2)). This provision of the FESA applies to the issuance of permits by federal agencies. Before approving an action affecting critical habitat, the federal agency is required to consult with the USFWS who then issues a biological opinion evaluating whether the action will “*adversely modify*” critical habitat. Thus, the designation of critical habitat effectively gives the USFWS extensive regulatory control over the development of land designated as critical habitat.

The Migratory Bird Treaty Act of 1918 (MBTA) makes it unlawful to “*take*” any migratory bird or part, nest, or egg of such bird listed in wildlife protection treaties between the United States and Great Britain, the Republic of Mexico, Japan, and the Union of Soviet States.

The Bald Eagle and Golden Eagle Protection Act explicitly protects the bald eagle and golden eagle and imposes its own prohibition on any taking of these species. As defined in this act, take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb. Current USFWS policy is not to refer the incidental take of bald eagles for prosecution under the Bald Eagle and Golden Eagle Protection Act (16 U.S.C. 668-668d).

## STATE PROTECTION AND CLASSIFICATIONS

California's Endangered Species Act (CESA) defines an endangered species as “...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.” The State defines a threatened species as “...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection

and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.” Candidate species are defined as “...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.” Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of CESA addresses the taking of threatened or endangered species by stating “No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided...” Under CESA, “take” is defined as “...hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Exceptions authorized by the state to allow “take” require “...permits or memorandums of understanding...” and can be authorized for “...endangered species, threatened species, or candidate species for scientific, educational, or management purposes.” Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. SSC (“special” animals and plants) listings include special status species, including all state and federal protected and candidate taxa, Bureau of Land Management (BLM) and US Forest Service (USFS) sensitive species, species considered to be declining or rare by the CNPS or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing. This list is primarily a working document for the CDFW's CNDDDB project. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites. For the purposes of this assessment, the following acronyms are used for State status species:

SE	State Endangered
ST	State Threatened
SCE	State Candidate Endangered
SCT	State Candidate Threatened
SFP	State Fully Protected
SP	State Protected
SR	State Rare
SSC	California Species of Special Concern
CWL	California Watch List

Nesting birds, including raptors, are protected under California Fish and Game Code Section 3503, which reads, “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” In addition, under California Fish and Game Code Section 3503.5, “it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto”. Passerines and non-passerine land birds are further protected under California Fish and Game Code 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by CDFW.

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in the State. This organization has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of rare, threatened, or endangered vascular plant species of California (Tibor 2001). The list serves as the candidate list for listing as threatened and endangered by CDFW. The CNPS has developed five categories of rarity (CRPR):

CRPR 1A	Presumed extinct in California.
CRPR 1B	Rare, threatened, or endangered in California and elsewhere.
CRPR 2A	Plants presumed extirpated in California but common elsewhere
CRPR 2B	Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3	Plants about which we need more information – a review list.
CRPR 4	Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.

As stated by the CNPS:

*“Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.” (CNPS 2010)*

0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

## COUNTY PROTECTION AND CLASSIFICATION

As stated by the City of Rancho Cucamonga:

*“The County of San Bernardino Code of Ordinances (Title 8, Division 8, Chapter 88.01: Plant Protection and Management) provides regulations and guidelines for managing plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. A Tree or Plant Removal Permit is required for the removal of regulated trees and plants. Regulated trees and plants are identified in Section 88.01.070(b) (Regulated Trees) and Section 88.01.080(b) (Regulated Riparian Plants). Trees protected by Section 88.01.070(b) include (1) any living, native tree with a 6-inch or greater stem diameter or 19 inches in circumference measured 4.5 feet above natural grade level and (2) 3 or more palm trees in linear plantings which are 50 feet or greater in length within established windrows<sup>4</sup> or parkway plantings. Riparian plants are regulated in riparian areas located on private land within unincorporated areas of the County and on public land owned by the County, unless exempt. Section 88.01.080(b) applies to the removal of vegetation within 200 feet of the bank of a stream<sup>5</sup> or in an area indicated as a protected riparian area on an overlay map or Specific Plan.” (City of Rancho Cucamonga 2010)*

## LOCAL PROTECTION AND CLASSIFICATIONS

As stated by the City of Rancho Cucamonga:

*“The City’s Tree Preservation Ordinance in the Municipal Code (Title 19, Environmental Protection - Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine, and other trees growing within the City are a natural aesthetic resource and are worthy of protection. A permit is required for the removal, relocation, or destruction of a Heritage Tree.” (City of Rancho Cucamonga 2010)*

A certified arborist, horticulturist, or registered landscape architect familiar with the City of Rancho Cucamonga’s Tree Preservation Ordinance will be required to conduct an assessment of the mature trees proposed for removal to determine if a tree removal permit from the Community Development Director is required (17.16.080 Tree removal permit.). If required, a permit application will be submitted for review and approval.

## SENSITIVE HABITATS

As stated by CDFW:

*“One purpose of the vegetation classification is to assist in determining the level of rarity and imperilment of vegetation types. Ranking of alliances according to their degree of imperilment (as measured by rarity, trends, and threats) follows NatureServe’s Heritage Methodology, in which all alliances are listed with a G (global) and S (state) rank. For alliances with State ranks of S1-S3, all associations within them are also considered to be highly imperiled” (CDFW 2017c)*

No sensitive habitats were documented within the Study Area. As previously stated, coastal sage scrub extends primarily adjacent to the southwestern Study Area boundary. This vegetation community represents a remnant of alluvial fan sage scrub habitat (sensitive habitat). However, necessary fluvial, periodic flooding and scouring required to sustain alluvial fan sage scrub no longer persists. This conclusion is supported by the dense canopy cover of this vegetation community, dominance of California sagebrush, California buckwheat and lack of scale-broom.

## SENSITIVE PLANTS

The Study Area was assessed to determine the potential for thirty-six (36) sensitive plant species known to occur within the region, to occur onsite, as presented in Table 2, *Sensitive Plant Species Assessment*.

**Table 2.  
Sensitive Plant Species Assessment**

<b>Species Name</b> <i>(Scientific Name)</i> Status	<b>Habitat Description</b>	<b>Comments</b>
<b>Singlewhorl burrobrush</b> <i>(Ambrosia monogyra)</i>  CRPR 2B.2	Perennial shrub which generally blooms from August to November within chaparral or Sonoran Desert scrub in sandy substrates (CNPS 2021)	Not observed or expected to occur onsite based on a lack of detection or suitable habitat.
<b>Nevin’s barberry</b> <i>(Berberis nevinii)</i>  CRPR 1B.1 FE/SE	Perennial evergreen shrub which generally blooms from February to June within chaparral, cismontane woodland, coastal scrub, and riparian scrub in sandy, gravelly substrates (CNPS 2021)	Not observed onsite.

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>Slender mariposa lily</b> ( <i>Calochortus clavatus</i> var. <i>gracilis</i> )  CRPR 1B.2	Perennial bulbiferous herb which generally blooms from June to July within coastal bluff scrub, chaparral (maritime), lower montane coniferous forest (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>Plummer's mariposa-lily</b> ( <i>Calochortus plummerae</i> )  CRPR 4.2	Perennial bulbiferous herb which generally blooms from May to June within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and grassland habitats with granite and rocky substrates. (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.
<b>Smooth tarplant</b> ( <i>Centromadia pungens</i> ssp. <i>laevis</i> )  CRPR 1B.1	Annual herb which generally blooms from April to September within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland (alkaline substrates). (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat and alkaline substrates.
<b>Catalina mariposa-lily</b> ( <i>Calochortus catalinae</i> )  CRPR 4.2	Perennial bulbiferous herb which generally blooms from March to June within chaparral, cismontane woodland, valley grassland, and coastal sage scrub (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.
<b>Peninsular spineflower</b> ( <i>Chorizanthe leptotheca</i> )  CRPR 4.2	Annual herb which generally blooms from May to August within chaparral, coastal scrub, lower montane coniferous forest in alluvial fan, granitic substrates. (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.
<b>Parry's spineflower</b> ( <i>Chorizanthe parryi</i> var. <i>parryi</i> )  CRPR 1B.1	Annual herb which generally blooms from April to June within chaparral, cismontane woodland, coastal scrub and grassland habitats with sandy and/or rocky openings. (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>White-bracted spineflower</b> ( <i>Chorizanthe xanti</i> var. <i>leucotheca</i> )  CRPR 1B.2	Annual herb which generally blooms from April to June within coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodland in sandy or gravelly substrates. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>California saw-grass</b> ( <i>Cladium californicum</i> )  CRPR 2B.2	Perennial rhizomatous herb which generally blooms from June to September within meadows, seeps, marshes and swamps in both alkaline and freshwater. (CNPS 2021)	Not detected or expected to occur onsite based on a lack of suitable habitat.
<b>Peirson's spring beauty</b> ( <i>Claytonia lanceolata</i> var. <i>peirsonii</i> )  CRPR 3.1	Perennial herb which generally blooms from March to June within subalpine coniferous forest and upper montane coniferous forest. (CNPS 2021)	Not detected or expected to occur onsite based on a lack of suitable habitat.
<b>Paniculate tarplant</b> ( <i>Deinandra paniculata</i> )  CRPR 4.2	Annual herb which generally blooms from March to November within coastal sage scrub, valley foothill grassland and vernal pools with sandy substrates. (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.
<b>Slender-horned spineflower</b> ( <i>Dodecahema leptoceras</i> )  CRPR 1B.1 FE/SE	Annual herb which generally blooms from April to June within chaparral, cismontane woodland and coastal scrub (alluvial fan) with sandy substrates. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>Many-stemmed dudleya</b> ( <i>Dudleya multicaulis</i> )  CRPR 1B.2	Perennial herb which generally blooms from April to July within chaparral, coastal scrub and valley and foothill grassland often associated with clay substrates. (CNPS 2021)	Not detected or expected to occur onsite based on a lack of suitable substrates.
<b>Santa Ana River woollystar</b> ( <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> )  CRPR 1B.1 FE/SE	Perennial herb which generally blooms from April to September within chaparral, coastal scrub (alluvial fan) in sandy and gravelly substrates. (CNPS 2021)	Not detected onsite.
<b>Vanishing wild buckwheat</b> ( <i>Eriogonum evanidum</i> )  CRPR 1B.1	Annual herb which generally blooms from July to October within chaparral, cismontane woodland, lower montane coniferous forest, and pinyon and juniper woodland in sandy	Not expected to occur onsite based on a lack of suitable habitat



<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
	and gravelly substrates. (CNPS 2021)	
<b>San Gabriel bedstraw</b> ( <i>Galium grande</i> )  CRPR 1B.2	Perennial deciduous shrub which generally blooms from January to July within broad-leaved upland forest, chaparral, cismontane woodland and lower montane coniferous forest habitats. (CNPS 2021)	Not detected onsite.
<b>Mesa horkelia</b> ( <i>Horkelia cuneata</i> ssp. <i>puberula</i> )  CRPR 1B.1	Perennial herb which generally blooms from February to September within chaparral (maritime), cismontane woodland and coastal scrub with sandy or gravelly substrates. (CNPS 2021)	Not detected onsite.
<b>Southern California black walnut</b> ( <i>Juglans californica</i> )  CRPR 4.2	Perennial deciduous tree which generally blooms from March to August in chaparral, cismontane woodland, coastal scrub, and riparian woodland in alluvial soils. (CNPS 2021)	Not detected onsite.
<b>Robinson's pepper-grass</b> ( <i>Lepidium virginicum</i> var. <i>robinsonii</i> )  CRPR 4.3	Annual herb which generally blooms from January to July within chaparral and coastal sage scrub habitats. (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.
<b>Lemon lily</b> ( <i>Lilium parryi</i> )  CRPR 1B.2	Perennial bulbiferous herb which generally blooms from July to August within lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>San Gabriel linanthus</b> ( <i>Linanthus concinnus</i> )  CRPR 1B.2	Annual herb which generally blooms from April to July within chaparral, lower/upper montane coniferous forest in rocky openings. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>Parish's desert-thorn</b> ( <i>Lycium parishii</i> )  CRPR 2B.3	Perennial shrub generally blooms from March to April within coastal scrub and Sonoran Desert scrub. (CNPS 2021)	Not detected onsite.

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>Hall's monardella</b> ( <i>Monardella macrantha ssp. hallii</i> )  CRPR 1B.3	Perennial rhizomatous herb which generally blooms from June to October within broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. (CNPS 2021)	Not detected or expected to occur onsite based on a lack of suitable habitat.
<b>California muhly</b> ( <i>Muhlenbergia californica</i> )  CRPR 4.3	Perennial rhizomatous herb which generally blooms from June to September within mesic, seeps and streambanks, coastal scrub, chaparral, lower montane coniferous forest and meadows. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>Prostrate vernal pool navarretia</b> ( <i>Navarretia prostrata</i> )  CRPR 1B.1	Annual herb which generally blooms from April to July coastal sage scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>Woolly mountain-parsley</b> ( <i>Oreonana vestita</i> )  CRPR 1B.3	Perennial herb which generally blooms from March to September within lower montane coniferous forest, subalpine coniferous forest, upper coniferous forest within gravel or talus substrates (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>Rock Creek broomrape</b> ( <i>Orobanche valida ssp. valida</i> )  CRPR 1B.2	Perennial herb (parasitic) which generally blooms from May to September within chaparral and pinyon and juniper woodland in granitic substrates. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>Brand's star phacelia</b> ( <i>Phacelia stellaris</i> )  CRPR 1B.1 FC	Annual herb which generally blooms from March to June within coastal dunes and coastal scrub habitats. (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.
<b>White-rabbit tobacco</b> ( <i>Pseudognaphalium leucocephalum</i> )  CRPR 2B.2	Perennial herb which generally blooms from July to August within chaparral, cismontane woodland, coastal scrub, and riparian woodland with sandy or gravelly substrates. (CNPS 2021)	The coastal sage scrub and associated substrates provide suitable habitat for this species.

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>Sanford's arrowhead</b> ( <i>Sagittaria sanfordii</i> )	Perennial rhizomatous herb which generally blooms from May to November near marshes and swamps. (CNPS 2021).	Not expected to occur onsite based on a lack of suitable habitat.
<b>Salt spring checkerbloom</b> ( <i>Sidalcea neomexicana</i> )  CRPR 2.2	Perennial herb which generally blooms from March to June within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas within alkaline and mesic substrates gravelly substrates. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat and soils.
<b>Laguna Mountains jewelflower</b> ( <i>Streptanthus bernardinus</i> )  CRPR 4.3	Perennial herb which generally blooms from May to August within chaparral, lower montane coniferous forest. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<b>San Bernardino aster</b> ( <i>Symphotrichum defoliatum</i> )  CRPR 1B.2	Perennial rhizomatous herb which generally blooms from July to November near ditches, streams, springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland (vernally mesic). (CNPS 2021).	Not expected to occur onsite based on a lack of suitable habitat.
<b>Greata's aster</b> ( <i>Symphotrichum greatae</i> )  CRPR 1B.3	Perennial rhizomatous herb which generally blooms from June to October within broad-leaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest and riparian woodland habitats. (CNPS 2021)	Not expected to occur onsite based on a lack of suitable habitat.
<p><b>California Native Plant Society (CNPS): California Rare Plant Rank (CRPR)</b>  CRPR 1A – plants presumed extinct in California  CRPR 1B – plants rare, threatened, or endangered in California, but more common elsewhere  CRPR 2A – plants presumed extirpated in California but common elsewhere  CRPR 2B – plants rare, threatened, or endangered in California but more common elsewhere  CRPR 3 – plants about which we need more information, a review list  CRPR 4 – plants of limited distribution, a watch list  .1 – Seriously endangered in California  .2 – Fairly endangered in California  .3 – Not very endangered in California</p> <p><b>Federal (USFWS) Protection and Classification</b>  FE – Federally Endangered</p>		

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
FT – Federally Threatened FC – Federal Candidate for Listing  <b>State (CDFW) Protection and Classification</b> SE – State Endangered ST – State Threatened		

No suitable habitat or baseline conditions for federal or state listed threatened or endangered plant species was documented within the Study Area. However, suitable low to moderate quality habitat for a total of eight (8) regionally sensitive plant species was documented within the coastal sage scrub habitats located within the southwest region of the Study Area including:

- Plummer’s mariposa-lily (*Calochortus plummerae*), CRPR 4.2
- Catalina mariposa-lily (*Calochortus catalinae*), CRPR 4.2
- Peninsular spineflower (*Chorizanthe leptotheca*), CRPR 4.2
- Parry’s spineflower (*Chorizanthe parryi* var. *parryi*), CRPR 1B.1
- Paniculate tarplant (*Deinandra paniculata*), CRPR 4.2
- Robinson’s pepper-grass (*Lepidium virginicum* var. *robinsonii*), CRPR 4.3
- Brand’s star phacelia (*Phacelia stellaris*), CRPR 1B.1, FC
- White-rabbit tobacco (*Pseudognaphalium leucocephalum*), CRPR 2B.2

### **SENSITIVE WILDLIFE**

The Study Area was assessed to determine the potential for twenty-eight (28) sensitive wildlife species known to occur within the region, to occur onsite, as presented in Table 3, *Sensitive Wildlife Species Assessment*.

**Table 3.**  
**Sensitive Wildlife Species Assessment**

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>INVERTEBRATES</b>		
<b>Delhi Sands flower-loving fly</b> ( <i>Rhaphiomidas terminatus abdominalis</i> )  FE	Restricted to Delhi sand formations in Riverside and San Bernardino Counties.	Not expected to occur onsite based on a lack of suitable soils, Figure 8, <i>Soils Association Map</i> .

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>AMPHIBIANS</b>		
<b>Arroyo toad</b> ( <i>Anaxyrus californicus</i> )  FE/SSC	Shallow, slow moving active and braided stream channels with sandy substrates for breeding, bench and terrace habitats for foraging and aestivation, willow scrub, coastal sage scrub and riparian/oak woodlands.	Not expected to occur onsite based on a lack of suitable breeding and upland habitat.
<b>Southern Mountain yellow-legged frog</b> ( <i>Rana muscosa</i> )  FE/SE/CWL Southern California Distinct Population Segment	Occurs in close proximity to lakes, streams, pools in rocky tributaries and canyons.	Not expected to occur onsite based on a lack of suitable breeding habitat.
<b>REPTILES</b>		
<b>Coast horned lizard</b> ( <i>Phrynosoma blainvillii</i> )  SSC	The horned lizard occurs primarily in scrub, chaparral, and grassland habitats.	The coastal sage scrub and associated substrates provide suitable habitat for this species.
<b>BIRDS</b>		
<b>Cooper's hawk</b> ( <i>Accipiter cooperii</i> )  SSC	Cooper's hawk is most commonly found within or adjacent to riparian/oak forest and woodland habitats. This uncommon resident of California increases in numbers during winter migration.	Cooper's hawks occasionally nest in large pines and Eucalyptus trees. The mature ornamental trees documented within the Study Area represent potential nesting habitat for this species.
<b>Sharp-shinned hawk</b> ( <i>Accipiter striatus</i> )  CWL	Potential habitat for the sharp-shinned hawk includes montane coniferous forest for potential breeding areas and riparian scrub, woodland, forest, oak woodland chaparral, and scrub habitats for foraging.	Not expected to breed onsite based on a lack of suitable habitat.

Species Name (Scientific Name) Status	Habitat Description	Comments
<b>Southern California rufous-crowned sparrow</b> ( <i>Aimophila ruficeps canescens</i> )  CWL	Southern California rufous-crowned sparrow is a non-migratory bird species that primarily occurs within sage scrub and grassland habitats and to a lesser extent chaparral sub-associations. This species generally breeds on the ground within grassland and scrub communities in the western and central regions of California.	The coastal sage scrub represents suitable foraging and breeding habitat for this species.
<b>Golden eagle</b> ( <i>Aquila chrysaetos</i> )  CWL, SFP	Within southern California, the species prefers grasslands, brushlands (coastal sage scrub and chaparral), deserts, oak savannas, open coniferous forests, and montane valleys.	Not expected to breed onsite based on a lack of suitable habitat.
<b>Burrowing owl</b> ( <i>Athene cunicularia</i> )  SSC	The burrowing owl uses predominantly open land, including grassland, agriculture (e.g., dry-land farming and grazing areas), playa, and sparse coastal sage scrub and desert scrub habitats. Some breeding burrowing owls are year-round residents and additional individuals from the north may winter throughout the region.	No occupied burrows were documented within the Study Area. However, this species may occupy the disturbed habitats in the eastern region of the Study Area during annual migration.
<b>Northern Harrier</b> ( <i>Circus cyaneus</i> )  SSC	The northern harrier frequents open wetlands, wet and lightly grazed pastures, old fields, dry uplands, upland prairies, mesic grasslands, drained marshlands, croplands, shrub-steppe, meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands and is seldom found in wooded.	Not expected to occur onsite based on a lack of suitable habitat.

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>Western yellow-billed cuckoo</b> ( <i>Coccyzus americanus occidentalis</i> )  FT/SE	The western yellow-billed cuckoo inhabits dense riparian and shrub communities.	Not expected to occur onsite based on a lack of suitable riparian habitat.
<b>White-tailed kite</b> ( <i>Elanus leucurus</i> )  SFP	The white-tailed kite is found in riparian, oak woodlands adjacent to open spaces including grasslands, wetlands, savannahs and agricultural fields. This non-migratory bird occurs in lower elevations of California.	Not expected to breed onsite based on a lack of suitable habitat.
<b>Southwestern willow flycatcher</b> ( <i>Empidonax traillii extimus</i> )  FE/SE	The southwestern willow flycatcher breeds in dense riparian and shrub communities where exposed water is present including rivers, wetlands and reservoirs.	Not expected to occur onsite based on a lack of suitable riparian habitat.
<b>Merlin</b> ( <i>Falco columbarius</i> )  CWL	Transient in the spring and fall and may occasionally winter within the area. It does not require specific conditions or locations for nesting because it does not nest in the region.	Not expected onsite. Breeds in the northern Great Plains.
<b>Prairie falcon</b> ( <i>Falco mexicanus</i> )  CWL	Habitat use of the prairie falcon includes annual grasslands to alpine meadows. The prairie falcon is associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields during the winter season, and desert scrub areas, all typically dry environments of western North American where there are cliffs or bluffs for nest sites.	Not expected to breed onsite based on a lack of suitable habitat.
<b>American peregrine falcon</b> ( <i>Falco peregrinus anatum</i> )  SFP	Throughout the species' range, peregrine falcons are found in a large variety of open habitats, including tundra, marshes, seacoasts, savannahs and high mountains.	Not expected to breed onsite based on a lack of suitable habitat.

<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
<b>Yellow-breasted Chat</b> ( <i>Icteria virens</i> ) SSC	The yellow-breasted chat is associated with riparian woodland and riparian scrub habitats.	Not expected to occur onsite based on a lack of suitable riparian habitat
<b>Coastal California gnatcatcher</b> ( <i>Polioptila californica californica</i> ) FT/SSC	The coastal California gnatcatcher is a non-migratory bird species that primarily occurs within sage scrub habitats in coastal southern California dominated by California sagebrush.	The coastal sage scrub represents suitable foraging and breeding habitat for this species.
<b>Yellow Warbler</b> ( <i>Setophaga petechia</i> ) SSC	Habitat characteristics of the yellow warbler are well known to include riparian scrub, forest and woodland vegetation.	Not expected to occur onsite based on a lack of suitable riparian habitat
<b>Least Bell's vireo</b> ( <i>Vireo bellii pusillus</i> ) FE/SE	Least Bell's vireo reside in riparian habitats with a well-defined understory including southern willow scrub, mulefat, and riparian forest/woodland habitats.	Not expected to occur onsite based on a lack of suitable riparian habitat.
<b>MAMMALS</b>		
<b>Pallid bat</b> ( <i>Antrozous pallidus</i> ) SSC	Roosts in rocky areas and forages in grassland, shrublands, and woodlands.	Not expected to occur onsite based on a lack of suitable habitat
<b>Northwestern San Diego pocket mouse</b> ( <i>Chaetodipus fallax fallax</i> ) SSC	The northwestern San Diego pocket mouse occurs in coastal sage, upland sage scrubs, and alluvial fan sage scrub, sage scrub/grassland ecotones, chaparral, and desert scrubs at all elevations up to 6,000 feet.	The coastal sage scrub represents suitable habitat for this species.
<b>San Bernardino kangaroo rat</b> ( <i>Dipodomys merriami parvus</i> ) FE/SSC	Prefers alluvial scrub, coastal sage scrub habitats with sandy and gravelly substrates.	Although suitable soils were documented onsite, the species is not expected to occur onsite based on a lack of suitable habitat. The mature thick canopy cover does not provide suitable habitat for this species.
<b>Western mastiff bat</b> ( <i>Eumops perotis californicus</i> )	Roosts in rocky areas and forages in grassland, shrublands, and	Not expected to occur onsite based on a lack of suitable habitat.



<b>Species Name</b> ( <i>Scientific Name</i> ) Status	<b>Habitat Description</b>	<b>Comments</b>
SSC	woodlands.	
<b>Western yellow bat</b> ( <i>Lasiurus xanthinus</i> ) SSC	Roosts in the skirts of palm trees and forages in adjacent habitats.	Not expected to occur onsite based on a lack of suitable foraging habitat within the vicinity of the Study Area.
<b>San Diego black-tailed jackrabbit</b> ( <i>Lepus californicus bennettii</i> ) SSC	The San Diego black-tailed jackrabbit in open habitats, primarily including grasslands, sage scrub, alluvial fan sage scrub, and Great Basin sage scrub.	Not observed or expected to occur onsite based on a lack of suitable habitat and sign of burrow structures.
<b>Desert San Diego woodrat</b> ( <i>Neotoma lepida intermedia</i> ) SSC	The San Diego desert woodrat is found in sage scrub and chaparral wherever there are rock outcrops, boulders, cactus patches and dense undergrowth.	The coastal sage scrub represents suitable habitat for this species.
<b>Los Angeles pocket mouse</b> ( <i>Perognathus longimembris brevinasus</i> ) SSC	Low elevation grassland alluvial sage scrub and coastal sage scrub habitats.	Not expected to occur onsite based on a lack of suitable habitat. The mature thick canopy cover does not provide suitable habitat for this species.
<p><b>Federal (USFWS) Protection and Classification</b>  FE – Federally Endangered  FT – Federally Threatened  FC – Federal Candidate for Listing</p> <p><b>State (CDFW) Protection and Classification</b>  SE – State Endangered  ST – State Threatened  SSC – State Species of Special Concern  CWL – California Watch List  SPF – State Fully Protected</p>		

Suitable habitat for one (1) federal or state listed threatened or endangered wildlife species was documented within the Study Area including:

- Coastal California gnatcatcher (*Poliioptila californica californica*), FT/SSC

Suitable low to moderate quality habitat for a total of six (6) regionally sensitive wildlife species listed as State Species of Special Concern and California Watch List was documented within the coastal sage scrub and disturbed habitats located within the southwest and eastern regions of the Study Area including:

- Coast horned lizard (*Phrynosoma blainvillii*), SSC
- Cooper's hawk (*Accipiter cooperii*), SSC

- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), CWL
- Burrowing owl (*Athene cunicularia*), SSC
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), SSC
- Desert San Diego woodrat (*Neotoma lepida intermedia*), SSC

The Study Area does not occur within or adjacent to a USFWS designated critical habitat for any federally listed threatened or endangered species.

## **JURISDICTIONAL WETLAND RESOURCES**

A single wetland (open water) and potential jurisdictional resources (drainages in the southwestern region of Study Area) may be regulated by the USACE, CDFW, and/or RWQCB, as illustrated in Figure 3, *Vegetation Communities Map*.

Prior to issuance of grading or construction permits within phases potential directly or indirectly impacting wetlands or jurisdictional resources, the project applicant will conduct a formal jurisdictional delineation to determine the extent of resources onsite regulated by the USACE, CDFW, or RWQCB. The project applicant will also be required to obtain all applicable permits which may include, 404 Nationwide Permit from the USACE, 1602 Streambed Alteration Agreement from CDFW, and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260.

Impacts to water quality would be less than significant during both construction and operation (i.e., compliance with NPDES permit and MS4 code provisions would ensure no impacts to species, and compliance with County of San Bernardino Phase 1 Municipal Separate Storm Sewer System (MS4) permit requirements and LID manual would also ensure no indirect impacts to species).

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## **ENVIRONMENTAL IMPACTS**

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The following section includes an analysis of the direct and/or indirect impacts of the proposed action on sensitive biological resources. This analysis characterizes the project related activities that are anticipated to adversely impact the species, and when feasible, quantifies such impacts. Direct effects are defined as actions that may cause an immediate effect on the species or its habitat, including the effects of interrelated actions and interdependent actions. Indirect effects are caused by or result from the proposed actions, are later in time, and are reasonably certain to occur. Indirect effects may occur outside of the area directly affected by the proposed action.

### **THRESHOLD OF SIGNIFICANCE**

The environmental impacts relative to biological resources are assessed using impact significance criteria which mirror the policy statement contained in the CEQA at Section 21001 (c) of the Public Resources Code. This section reflects that the legislature has established it to be the policy of the state to:

*“Prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-*

*perpetuating levels, and preserve for future generations representations of all plant and animal communities...”*

The following definitions apply to the significance criteria for biological resources:

- “*Endangered*” means that the species is listed as endangered under state or federal law.
- “*Threatened*” means that the species is listed as threatened under state or federal law.
- “*Rare*” means that the species exists in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens.
- “*Region*” refers to the area within southern California that is within the range of the individual species.
- “*Sensitive habitat*” refers to habitat for plants and animals (1) which plays a special role in perpetuating species utilizing the habitat on the property, and (2) without which there would be substantial danger that the population of that species would drop below self-perpetuating levels.
- “*Substantial effect*” means significance loss or harm of a magnitude which, based on current scientific data and knowledge, (1) would cause a species or a native plant or animal community to drop below self-perpetuating levels on a statewide or regional basis or (2) would cause a species to become threatened or endangered.

Also, the determination of impacts has been made according to the federal definition of “*take*”. FESA prohibits the “*taking*” of a member of an endangered or threatened wildlife species or removing, damaging, or destroying a listed plant species by any person (including private individuals and private or government entities). FESA defines “*take*” as “*to harass, harm, pursue, hunt, shoot, would, kill, trap, capture or collect*” an endangered or threatened species, or to attempt to engage in these activities.

## DIRECT IMPACTS

Specifically, the biological resources assessment report addresses the following CEQA Environmental Checklist items.

Environmental Issues	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the Project:				
<b>a)</b> Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
<b>b)</b> Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
<b>c)</b> Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
<b>d)</b> Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
<b>e)</b> Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
<b>f)</b> Conflict with the provisions of an adopted Habitat Conservation Plan, Native Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

The proposed action including the demolition, construction, and renovation of buildings and facilities, parking additions and improvements to circulation would result in impacts to 25.02 acres of developed/ornamental landscaping and natural vegetation as outlined in Table 4, *Study Area Vegetation Community Impact Acreages*, and illustrated in Figure 9, *Vegetation Communities Impact Map*.

**Table 4.**  
**Study Area Vegetation Community Impact Acreages**

<b>Vegetation Community</b>	<b>Acres</b>	<b>Impacts</b>
Developed/Ornamental Landscaping	149.18	20.82
Coastal Sage Scrub	8.52	1.91
Disturbed	5.35	2.06
Mule Fat Scrub	0.04	0.00
Open Water (Detention Basin)	0.23	0.23
<b>TOTAL</b>	<b>163.32</b>	<b>25.02</b>

Source: Cadre Environmental 2021.

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?*

**Less than Significant with Mitigation.** Suitable habitat for the federally threatened coastal California gnatcatcher was detected within those areas mapped as coastal sage scrub within the Study Area. Prior to initiating any phase of the project that ay directly or indirectly impact coastal sage scrub habitat, focused USFWS protocol surveys to determine the presence/absence of the coastal California gnatcatcher will be required. Implementation of **BIO-MM1** Coastal California Gnatcatcher Surveys will ensure compliance with CDFW and USFWS species protection regulations and reduce impacts to less than significant.

Suitable habitat for four (4) sensitive wildlife species potentially occurring within the coastal sage scrub was documented within the Study Area including, coast horned lizard, southern California rufous-crowned sparrow, northwestern San Diego pocket mouse, and desert San Diego woodrat. Impacts to 1.91 acre of potentially suitable habitat (coastal sage scrub) would not result in a significant impact to these species locally or regionally because 1) these species remain regionally widespread and have a low sensitive status, 2) the loss of one or a few individuals would not substantially reduce or threaten the regional or local populations of these species below self-sustaining levels, 3) and the loss of only 1.91-acre within 8.52-acre of suitable habitat that is isolated and surrounded by development. No mitigation is required or proposed.

No suitable habitat for federal or state listed plant species was documented within the Study Area. Suitable habitat for eight (8) sensitive floral species potentially occurring within the coastal sage scrub was documented within the Study Area including, Plummer’s mariposa-lily, Catalina mariposa-lily, peninsular spineflower, Parry’s spineflower, paniculate tarplant, Robinson’s pepper-grass, Brand’s star phacelia, and white-rabbit tobacco. Impacts to 1.91 acre of potentially suitable habitat (coastal sage

scrub) would not result in a significant impact to these species locally or regionally because 1) these species remain regionally widespread and have a low sensitive status, 2) the loss of one or a few individuals would not substantially reduce or threaten the regional or local populations of these species below self-sustaining levels, 3) and the loss of only 1.91-acre within 8.52-acre of suitable habitat that is isolated and surrounded by development. No mitigation is required or proposed.

There is a possibility of burrowing owl colonization within the eastern region of the Study Area prior to site grading within the disturbed habitat. To ensure that no direct loss of individuals occurs, mitigation will be implemented prior to initiation of on-site grading activities within any phase of the project mapped as disturbed. A preconstruction survey for burrowing owls shall be conducted by a qualified biologist. Implementation of **BIO-MM2** Burrowing Owl Preconstruction Survey will ensure compliance with CDFW and USFWS species protection regulations and reduce impacts to less than significant.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?*

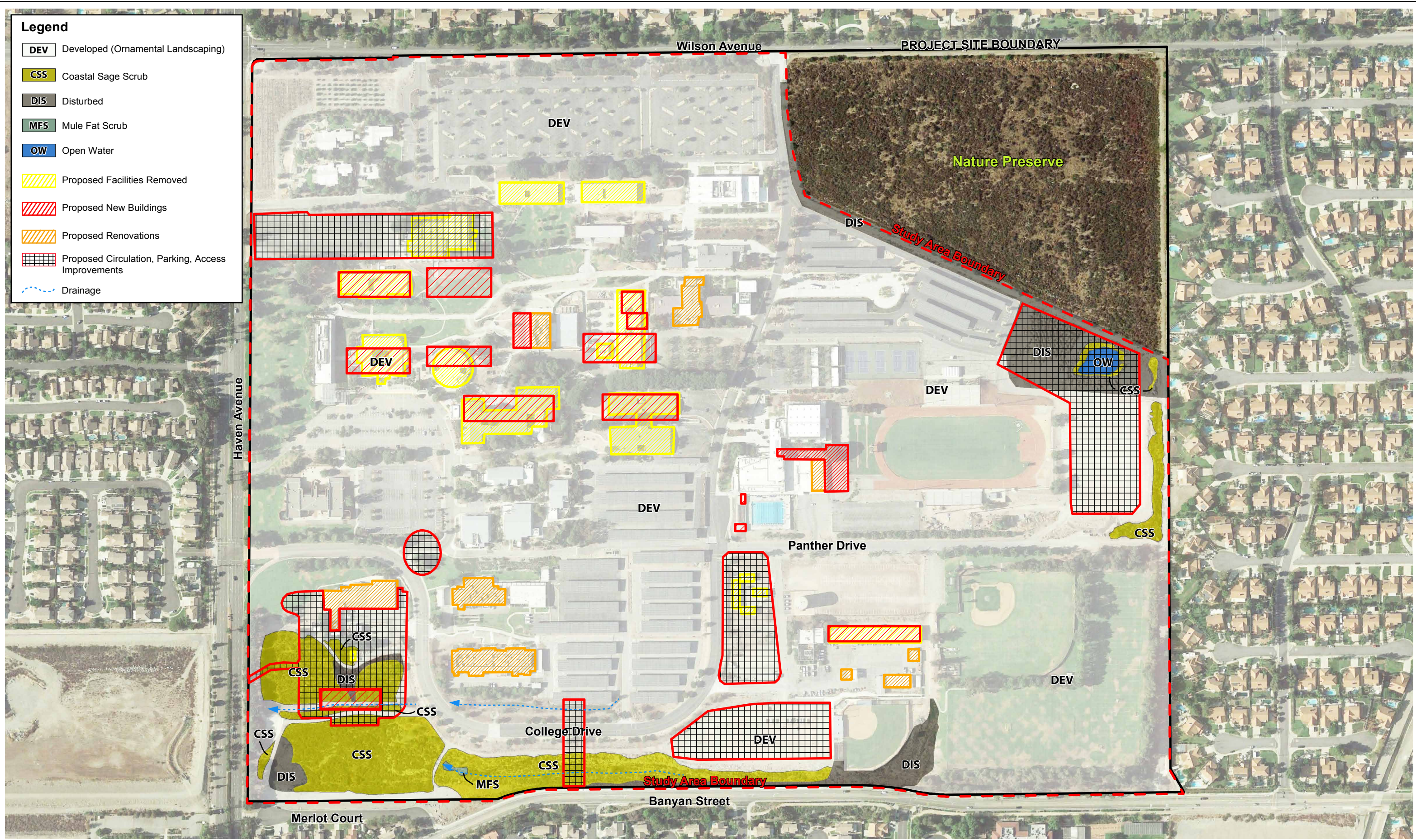
**No Impact.** The 0.04-acre of mule fat scrub will not be directly or indirectly impacted as a result of any phase of the proposed project. No sensitive habitats were documented within the Study Area. As previously stated, coastal sage scrub extends primarily adjacent to the southwestern Study Area boundary. This vegetation community represents a remnant of alluvial fan sage scrub habitat (sensitive habitat). However, necessary fluvial, periodic flooding and scouring required to sustain alluvial fan sage scrub no longer persists. This conclusion is supported by the dense canopy cover of this vegetation community, dominance of California sagebrush, California buckwheat and lack of scale-broom which warrant classification as coastal sage scrub.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**Less than Significant with Mitigation.** A single wetland (open water) and potential jurisdictional resources (drainages in the southwestern region of Study Area) may be regulated by the USACE, CDFW, and/or RWQCB, as illustrated in Figure 3, *Vegetation Communities Map*.

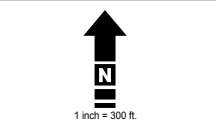
Prior to issuance of grading or construction permits within phases potential directly or indirectly impacting wetlands or jurisdictional resources, the project applicant will conduct a formal jurisdictional delineation to determine the extent of resources onsite regulated by the USACE, CDFW, or RWQCB. The project applicant will also be required to obtain all applicable permits which may include, 404 Nationwide Permit from the USACE, 1602 Streambed Alteration Agreement from CDFW, and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260. Implementation of **BIO-MM3** USACE/CDFW/RWQCB, Permits and Certifications will ensure compliance with regulatory protection regulations and reduce impacts to less than significant.





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**Figure 9 - Vegetation Communities Impact Map**  
 Biological Resources Technical Report  
 Chaffey College Rancho Cucamonga Campus Master Plan





- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Less than Significant with Mitigation.** The Study Area and Project Site are surrounded by urbanized uses including residential development and high traffic roadways and do not represent a wildlife movement corridor or route between open space habitats. However, the native and non-native ornamental vegetation, trees and shrubs within the Study Area are expected to potentially provide nesting habitat for common and sensitive bird and raptors (including the Cooper's hawk) protected under CDFG Code Section 3503. Mitigation for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1<sup>st</sup> and February 15<sup>th</sup>) does not require preconstruction nesting bird surveys. If any phase of construction is proposed between February 16<sup>th</sup> and August 31<sup>st</sup>, a qualified biologist must conduct a preconstruction nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds or raptors within or directly adjacent (100 feet) to the impact area.

Loss of an active nest would be considered a potentially significant impact. Implementation and compliance with **BIO-MM4** Regulatory Requirement CDFG Code will reduce potential impacts to nesting birds and raptors to less than significant.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**Less than Significant.** The City of Rancho Cucamonga's tree preservation ordinances regulate the removal of heritage trees. The City's Tree Preservation Municipal Code (Chapter 17, Tree Preservation – Chapter 17.80) states that eucalyptus, palm, oak, sycamore, pine and other trees growing within the City are a natural aesthetic resource and are worthy of protection. Prior to removal of a heritage tree within the City limits, a tree removal permit shall be obtained from the Planning Director and replacement trees may be required consistent with the City code. As stated by the City of Rancho Cucamonga:

*"All "heritage trees" are protected under the City's ordinance, including those on private property. "Heritage trees" means any tree, shrub, or plant that meets at least one of the following criteria: 1. All Eucalyptus windrows; or 2. All woody plants in excess of 30 feet in height and having a single trunk circumference of 20 inches or more, as measured four and a half feet (4.5') from ground level; or 3. Multi-trunk tree(s) having a total circumference of 30 inches or more, as measured 24 inches from ground level; or 4. A strand of trees the nature of which makes each dependent upon the others for survival; or 5. Any other tree as may be deemed historically or culturally significant by the Planning Director because of size, condition, location, or aesthetic qualities. (City of Rancho Cucamonga 2017)"*



However, the College District is not subject to the City's tree preservation ordinances, loss of a heritage tree defined by the City would not be considered a significant impact.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Native Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**No Impact.** There is no habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan in the City of Rancho Cucamonga. Therefore, implementation of all phases of the project would not result in a conflict with the provisions of an adopted habitat conservation plan and no impact would occur. Therefore, no mitigation is required or proposed.

## **INDIRECT IMPACTS**

Potential indirect impacts include hydrological modification, discharges, lighting, and construction noise during one or all phases of the project. Compliance with all the following guidelines will ensure that the proposed project activities will not result in significant indirect impacts to habitats and associated floral and faunal species within and/or adjacent to the Study Area.

### **Water Quality**

Impacts to water quality would be less than significant during both construction and operation (i.e., compliance with NPDES permit and MS4 code provisions would ensure no impacts to species, and compliance with County of San Bernardino Phase 1 Municipal Separate Storm Sewer System (MS4) permit requirements and LID manual would also ensure no impacts to species).

### **Toxics**

Toxic sources within the Study Area would be limited to those commonly associated with facility developments such as pesticides, insecticides, herbicides, fertilizers, and vehicle emissions. In order to mitigate for the potential effects of these toxics, each phase of the project will incorporate structural BMPs, as required in association with compliance with the NPDES permit system, in order to reduce the level of toxins introduced into the drainage system. Water quality measures will be implemented and no significant impacts are anticipated.

### **Lighting**

Impacts related to lighting would be less than significant during both construction and operation. All construction related activities would occur during daylight hours and permanent lighting of each phase of the project would be directed away from native habitats including the nature preserve and coastal sage scrub located outside of the impact areas. No significant impacts are anticipated.

## Noise

Indirect temporal noise impacts may occur to nesting bird species located adjacent to the Study Area during project construction. Noise and vibration associated with the use of heavy equipment during project construction has the potential to disrupt bird nesting, foraging and breeding behavior within and adjacent to sensitive receptor sites. Biological Mitigation Measure **BIO-MM4** Regulatory Requirement CDFG Code, has been incorporated into the project to collectively contribute to reducing potential indirect noise impacts to nesting bird species located within and adjacent to the Study Area to the level of less than significance.

No significant impacts are anticipated.

## CUMULATIVE IMPACTS

The temporary direct and/or indirect impacts of the project would not result in significant cumulative impacts (CEQA Section 15310) to environmental resources within the region of the Study Area. Cumulative impacts refer to incremental effects of an individual project when assessed with the effects of past, current, and proposed projects. The project represents primarily the enhancement (redevelopment) of existing structures and facilities. A total of 1.91-acre of permanent impacts to native habitat (coastal sage scrub) within the Study Area would not result in an adverse cumulative impact.

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## MITIGATION & AVOIDANCE MEASURES

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The following biological mitigation measures (MM) address those adverse impacts determined to be potentially significant or are relevant to the protection of biological resources to the extent practicable as part of ensuring compliance and CEQA guidelines.

### **BIO-MM1 Coastal California Gnatcatcher Surveys**

Suitable habitat for the federally threatened coastal California gnatcatcher was documented within and adjacent to the Study Area where coastal sage scrub was mapped. To ensure proposed project activities do not result in direct and/or indirect impacts to the species, any phase of the project that may result in direct/indirect impacts to coastal sage scrub will conduct focused USFWS protocol surveys to determine presence/absence of the species.

Focused surveys for the coastal California gnatcatcher will follow the USFWS protocol guidelines for conducting breeding or non-breeding season coastal California gnatcatcher surveys. Specifically, nine (9) non-breeding or six (6) breeding season surveys will be conducted within all suitable habitats (coastal sage scrub) within the Study Area based on when the surveys are initiated. Surveys will only be conducted between the hours of 6:00am and 12:00pm when weather conditions provide conditions for high bird activity. Taped coastal California gnatcatcher vocalization will be played during the surveys in an effort to illicit a response from the species.

If the species is not detected within or adjacent to the phased action area or Study Area, no further action respective of this species is required. However, if the species is detected within or adjacent to the action area or Study Area, formal consultation with the USFWS will be required and appropriate take permit acquired.

## **BIO-MM2 Burrowing Owl Preconstruction Survey**

There is a possibility of owl colonization within the Study Area prior to site grading within the disturbed regions of the property. To ensure that no direct loss of individuals occurs, prior to initiation of on-site grading activities within any phase of the project resulting in direct impacts to disturbed habitat a preconstruction survey will be conducted. The preconstruction survey for burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 14 days prior to construction activities within the disturbed regions of the phased action area. If ground-disturbing activities are delayed or suspended for more than 14 days after the preconstruction survey, the site shall be resurveyed for owls.

If owls are determined to be present within or adjacent to the phased construction footprint, they shall be captured and relocated. The preconstruction survey and any relocation activity shall be conducted in accordance with the CDFW Staff Report on Burrowing Owl Mitigation, 2012. According to CDFW guidelines, mitigation actions will be conducted from September 1<sup>st</sup> to January 31<sup>st</sup>, which is prior to the nesting season. However, burrowing owl nesting activity is variable, and as such the time frame will be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFW guidelines) until the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Occupied burrows shall not be disturbed during the nesting season (February 1<sup>st</sup> through August 31<sup>st</sup>) unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: a) the adult birds have not begun egg-laying and incubation; or b) the juveniles from the occupied burrows are foraging independently and are capable of independent survival. If a biologist is unable to verify one of the above conditions, then no disturbance shall occur within 300 feet of the burrowing owls nest during the breeding season to avoid abandonment of the young.

## **BIO-MM3 USACE/CDFW/RWQCB, Permits and Certifications**

Prior to issuance of grading or construction permits within phases potential directly or indirectly impacting wetlands or jurisdictional resources, the project applicant will conduct a formal jurisdictional delineation to determine the extent of resources onsite regulated by the USACE, CDFW, or RWQCB. The project applicant will also be required to obtain all applicable permits which may include, 404 Nationwide Permit from the USACE, 1602 Streambed Alteration Agreement from CDFW, and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260.

## **BIO MM4 Regulatory Requirement CDFG Code**

Regulatory requirement for potential direct/indirect impacts to nesting common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1<sup>st</sup> and January

31<sup>st</sup>) do not require pre-removal nesting bird surveys. If any phase of construction is proposed between February 1<sup>st</sup> and August 31<sup>st</sup>, a qualified biologist will conduct a nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (100 feet) to the Study Area.

The survey(s) will focus on identifying any raptors and/or bird nests that are directly or indirectly affected by construction activities. If active nests are documented, species-specific measures will be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of a nest will be postponed until the young birds have fledged. The perimeter of the nest setback zone will be fenced or adequately demarcated with stakes and flagging at 20-foot intervals, and construction personnel and activities restricted from the area.

The qualified biologist will serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur.

Implementation of Mitigation Measures BIO-MM1 to BIO-MM4 would reduce all potential significant unavoidable impacts on biological resources below a level of significance for all phases of the proposed action.

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Certification *"I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge"*.

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