

# Natura Impact Statement

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## Appropriate Assessment of WuXi Biologics Facility Dundalk, Co. Louth

Prepared by: Moore Group – Environmental Services

29 June 2020

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On behalf of WuXi Biologics Ireland Ltd.  
& the EPA

|                          |   |
|--------------------------|---|
| <b>Project Proponent</b> | WuXi Biologics Ireland Ltd.   |
| <b>Project</b>           | WuXi Biologics Facility<br>Dundalk, Co. Louth   |
| <b>Title</b>             | Natura Impact Statement<br>Appropriate Assessment of<br>WuXi Biologics Facility<br>Dundalk, Co. Louth |

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| <b>Moore Archaeological and Environmental Services Limited</b> |                          |                                     |                               |

## Abbreviations

|      |                                     |
|------|-------------------------------------|
| AA   | Appropriate Assessment              |
| EEC  | European Economic Community         |
| EPA  | Environmental Protection Agency     |
| EU   | European Union                      |
| GIS  | Geographical Information System     |
| NHA  | Natural Heritage Area               |
| NIS  | Natura Impact Statement             |
| NPWS | National Parks and Wildlife Service |
| OSI  | Ordnance Survey Ireland             |
| pNHA | proposed Natural Heritage Area      |
| SAC  | Special Area of Conservation        |
| SPA  | Special Protection Area             |
| SuDS | Sustainable Drainage System         |
| WWTS | Wastewater Treatment System         |

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## 1. Introduction

### 1.1. General Introduction

This Natura Impact Statement (NIS) has been prepared by Moore Group – Environmental Services on behalf of WuXi Biologics Ireland Ltd. and the EPA. This NIS report contains information to assist the competent authority carry out an Appropriate Assessment (AA) on the effects of the operation of the WuXi Biologics Facility at Dundalk, Co. Louth on European sites, to ascertain whether or not the project would adversely affect site integrity.

This NIS informs the Appropriate Assessment process in the determination of the significance of potential impacts on the conservation objectives of European sites. It is necessary that the Project has regard to Article 6 of the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (referred to as the Habitats Directive). This is transposed into Irish Law by Part XAB of the Planning and Development Act 2000 as amended and the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477) (referred to as the Habitats Regulations). The focus of the assessment is on objectively assessing by reference to the evidence as to whether the project will adversely affect the integrity of the European sites in light of their conservation objectives.

### 1.2. Legislative Background - The Habitats and Birds Directives

The Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) is the main legislative instrument for the protection and conservation of biodiversity in the EU. Under the Directive Member States are obliged to designate Special Areas of Conservation (SACs) which contain habitats or species considered important for protection and conservation in a European Union context.

The Birds Directive (Council Directive 79/409/EEC and Council Directive 2009/147/EC on the Conservation of Wild Birds), is concerned with the long-term protection and management of all wild bird species and their habitats in the EU. Among other things, the Directive requires that Special Protection Areas (SPAs) be established to protect migratory species and species which are rare, vulnerable, in danger of extinction, or otherwise require special attention.

Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas, designated under the Birds Directive, form a pan-European network of protected sites known as Natura 2000. The Habitats Directive sets out a unified system for the protection and management of SACs and SPAs.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to affect Natura 2000 sites.

Article 6(3) establishes the requirement to screen all plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)); Article 6(4) establishes requirements in cases of imperative reasons of overriding public interest:

*Article 6(3): "Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."*

*Article 6(4): "If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."*

### 1.3. Methodology

The Commission's methodological guidance (EC, 2002) promotes a four-stage process to complete the AA and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stages 1 and 2 deal with the main requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

**Stage 1 Screening:** This stage examines the likely effects of a project either alone or in combination with other projects upon a Natura 2000 site and considers whether it can be objectively concluded that there are not likely to be significant effects on a Natura 2000 site. Mitigation measures (i.e., measures

intended to avoid or reduce the harmful effects of the project on the site concerned) cannot be taken into account at this stage.

**Stage 2 Appropriate Assessment:** In this stage, there is a consideration of the impact of the project with a view to ascertain whether there will be any adverse effect on the integrity of the Natura 2000 site either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are predicted impacts, an assessment of the potential mitigation of those impacts is considered.

**Stage 3 Assessment of Alternative Solutions:** This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site.

**Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain:** Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the sites will be necessary.

#### 1.4. Guidance

The NIS has been compiled in accordance with guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 rev.).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article Guidance Document.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC (EC Environment Directorate-General, 2000); hereafter referred to as MN2000.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC (EC, 2018).

#### 1.5. Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites, and the environment within which they are located, are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
  - National Parks & Wildlife (NPWS) protected site boundary data;
  - Ordnance Survey of Ireland (OSI) mapping and aerial photography;

- OSI/Environmental Protection Agency (EPA) rivers and streams, and catchments;
- Open Street Maps;
- Digital Elevation Model over Europe (EU-DEM);
- Google Earth and Bing aerial photography 1995-2020;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from [www.npws.ie](http://www.npws.ie) including:
  - Natura 2000 - Standard Data Form;
  - Conservation Objectives;
  - Site Synopses;
- National Biodiversity Data Centre records:
  - Online database of rare, threatened and protected species;
  - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2013); and
- Relevant Development Plans and Local Area Plans in neighbouring areas;
  - Louth County Development Plan 2015-2021

#### 1.6. Statement of Authority

This report was compiled by Ger O'Donohoe (B.Sc. Applied Aquatic Sciences (GMIT, 1993) & M.Sc. Environmental Sciences (TCD, 1999)) who has over 25 years' experience in environmental impact assessment and has completed numerous reports for Appropriate Assessment Screening and Natura Impact Statements in terrestrial and aquatic habitats.

Engineering and technical data was supplied by AWN Consulting for the Project.

#### 1.7. Description of the Project

This report presents a screening assessment of the operation of a BioPharma facility at Haynestown/Mullagharlin, Dundalk, Co. Louth in fulfilment of an application for an LED Licence from the EPA. Planning permission was granted for the overall scheme under LCC ref. 08/822, with the duration extended by ref. 18/187 and amendments with ref. 18/817.

##### Wastewater on the site:

There are two principal stream of wastewater arising from the site; (1) foul and domestic wastewater and (2) Process and utility wastewater.

Foul and domestic water comprises domestic effluent from facilities such as toilets, showers, and canteen facilities. This domestic foul water (c. 30 m<sup>3</sup>/day) is dosed with very small quantities of septidose to minimise odours. The effluent goes to a pump / lift station (50m<sup>3</sup>/day) which controls the final discharge to the municipal sewer. The pump station is designed to normally have no more than



20% fill (i.e. 10m<sup>3</sup>). All pipework within the foul sewer has been designed to be self-cleaning with a minimum velocity of 0.75 m/s at half pipe flow and has been designed in accordance with the guidance provided in I.S. EN 752. The drainage lines will be constructed and tested in accordance with the requirements of the Greater Dublin Regional Code of Practice for Drainage Works. Pipes will be laid to a gradient not flatter than 1:150 for 150mm diameter pipes and 1:250 for pipes greater than 150mm diameter. Foul water drainage from kitchen and canteen facilities will also discharge through a grease separator, in accordance with IS EN 1825, prior to discharging into the main foul sewer network. This foul wastewater is discharged to public sewer for treatment at Dundalk Wastewater Treatment Plant.

Process and Utilities wastewater (1,185m<sup>3</sup>/day) is treated on site at the Wastewater Neutralisation Plant (WWNP), where they are neutralised prior to discharge to the public sewer for treatment at Dundalk Wastewater Treatment Plant. Any wastewater which has been in contact with biological materials will also be deactivated prior to being sent to the WWNP. This is facilitated by passing all biological wastewaters through a heat inactivation skid to deactivate all biological components.

The facility will contribute 5.9 % of the total influent to the Dundalk Wastewater Treatment Plant. The proposed values will be discussed with Irish Water and will be agreed with regards to the impact on Dundalk.

Figure 1 shows the location of the proposed development at Haynestown/Mullagharlin, Dundalk, County Louth, and Figure 2 shows a detailed view of the site on recent aerial photography.

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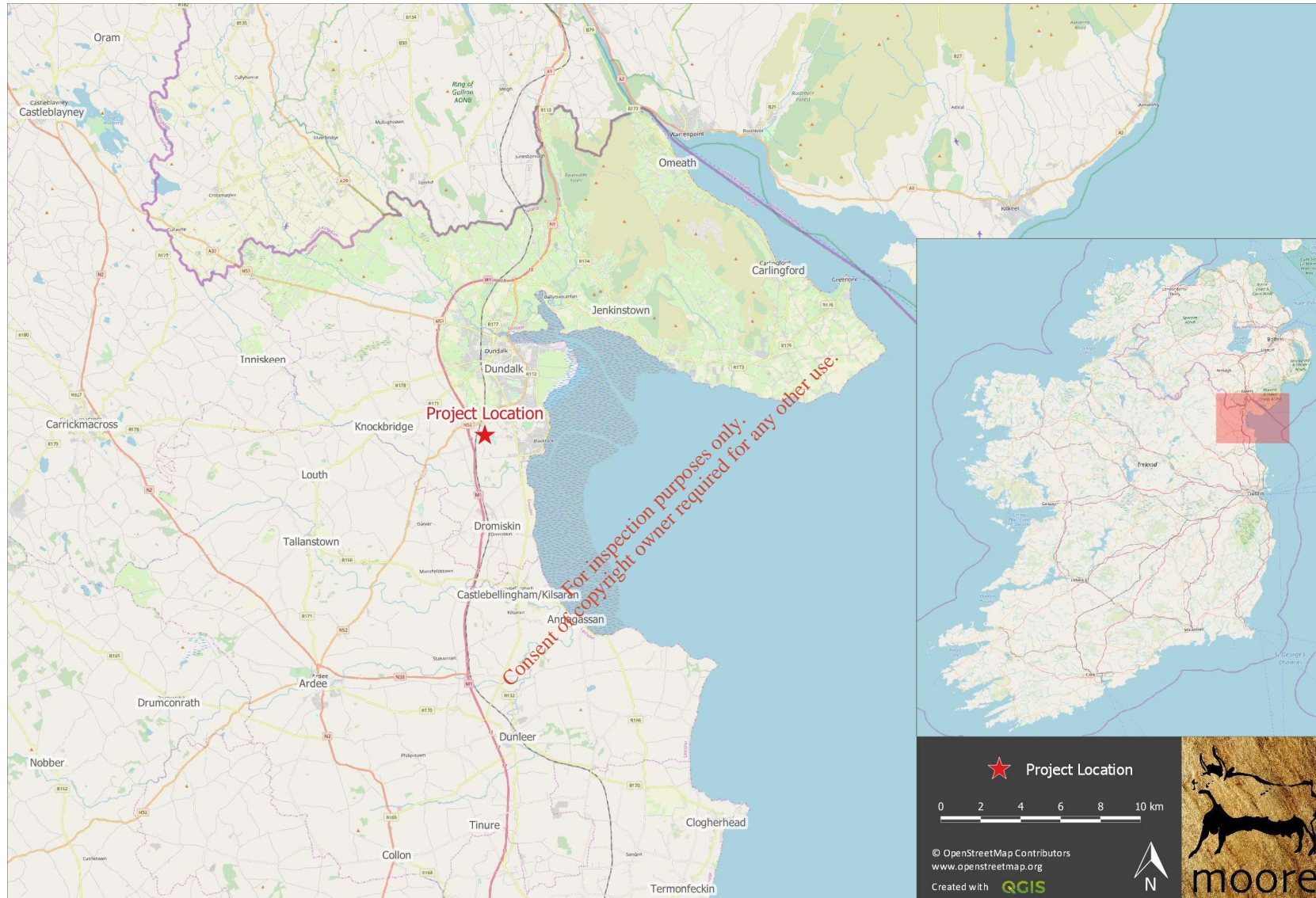


Figure 1. Showing the Project location to the south of Dundalk, County Louth.

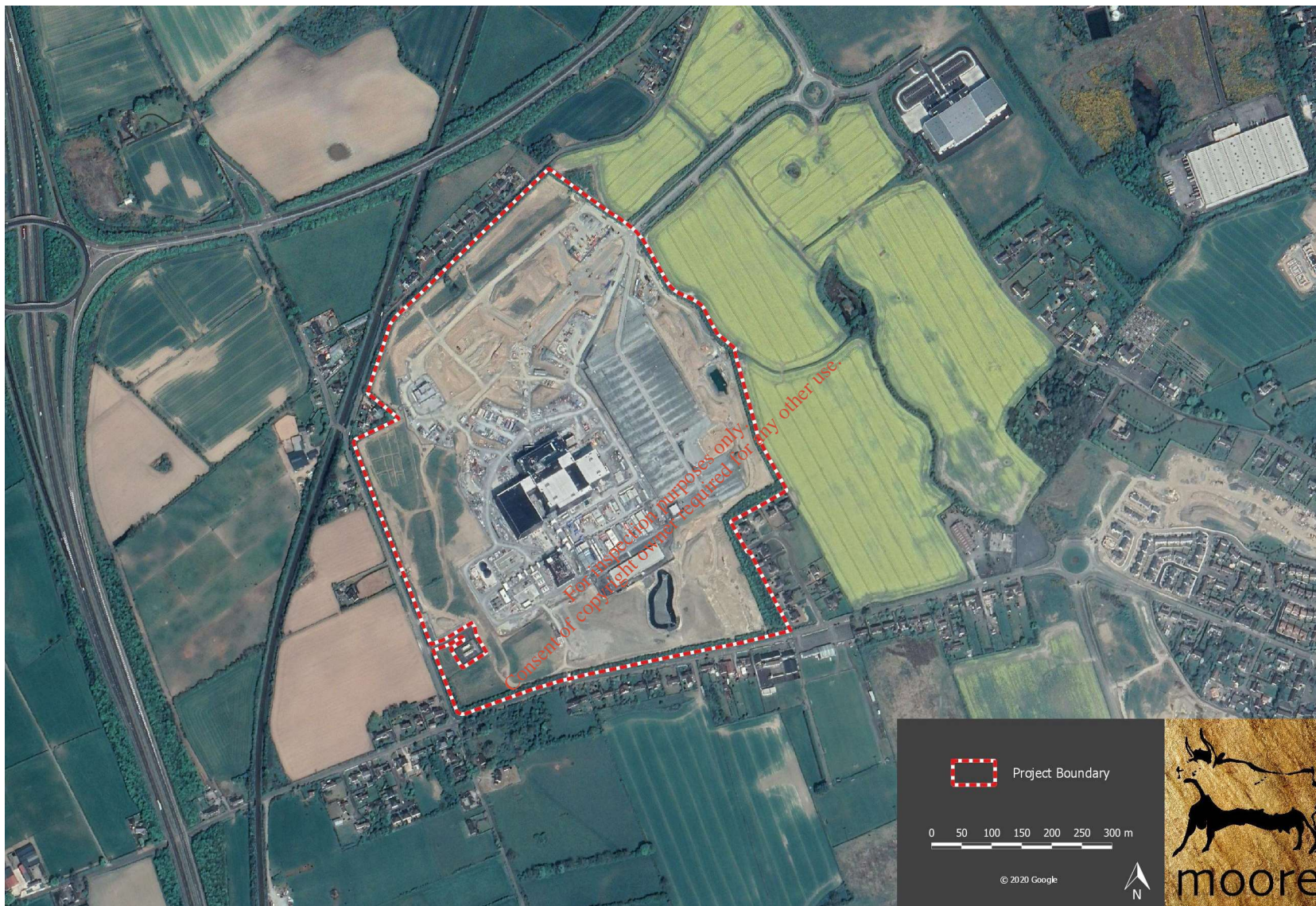


Figure 2. Showing the Project site development on recent aerial photography (25/04/2020).

## 2. Stage 1 – Screening for Appropriate Assessment

Screening determines whether appropriate assessment is necessary by examining:

- 1) Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and;
- 2) The potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives and considering whether these effects will be significant.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process in certain circumstances, becomes overly complicated, then the process must proceed to Stage 2 (AA).

Department of Environment, Heritage and Local Government (2009) Guidance on Appropriate Assessment recommends an assessment of European sites within a zone of impact of 15 km. This distance is a guidance only and the zone of impact has been identified taking consideration of the nature and location of the proposed Project to ensure all European sites with connectivity to it are considered in terms of a catchment-based assessment.

The zone of impact may be determined by connectivity to the proposed Project in terms of:

- Nature, scale, timing and duration of works and possible impacts, nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of pathways (dilution and dispersion; intervening ‘buffer’ lands, roads etc.); and
- Sensitivity and location of ecological features.

The guidance provides that, at the screening stage, it is necessary to identify the sites and compile information on their qualifying interests and conservation objectives. In preparation for this, the potential for source pathway receptor connectivity is firstly identified and detailed information is then provided on sites with connectivity. European sites that are located within 15 km of the Project are listed in Table 1 and presented in Figures 4 and 5, below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website ([www.npws.ie](http://www.npws.ie)) on the 12 June 2020.

*Table 1 European Sites located within 15km or the potential zone of impact<sup>1</sup> of the Project.*

| Site Code | Site name                 | Distance (km) <sup>2</sup> |
|-----------|---------------------------|----------------------------|
| 000453    | Carlingford Mountain SAC  | 9.67                       |
| 000455    | Dundalk Bay SAC           | 2.09                       |
| 004026    | Dundalk Bay SPA           | 1.93                       |
| 004091    | Stabannan-Braganstown SPA | 8.30                       |

The proposed Project relates to a Bio-Pharmaceutical Manufacturing Facility that is the process of being constructed on the outskirts of Dundalk. The nearest European sites are associated within Dundalk Bay and include Dundalk Bay SAC (Site Code 000455) and Dundalk Bay SPA (Site Code 004026), which are located c. 2 km to the east of the Project.

In accordance with Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, the Environmental Protection Agency has undertaken Appropriate Assessment screening to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity individually or in combination with other plans or projects is likely to have a significant effect on European Site. In this context, particular attention was paid to the European Sites listed below:

Dundalk Bay SAC (Site Code 000455)

Dundalk Bay SPA (Site Code 004026)

[EPA] AA Screening Determination:

*That the activity is not directly connected with or necessary to the management of any European site and that it cannot be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European site and accordingly determined that an Appropriate Assessment of the activity is required, and for this reason determined to require the applicant to submit a Natura Impact Statement.*

*This determination is based on the connectivity with European Sites and having regard to emissions from the installation, which could have negative ecological impacts on the European Sites and their qualifying interests.*

Adopting the precautionary approach, in line with current guidance and in consideration of management measures, a Stage 2 Appropriate Assessment of the project has been prepared as follows.

<sup>1</sup> All European sites potentially connected irrespective of the nature or scale of the proposed Project.

<sup>2</sup> Distances indicated are the closest geographical distance between the proposed Project and the European site boundary, as made available by the NPWS. Connectivity along hydrological pathways may be significantly greater.

### 3. Stage 2 – Appropriate Assessment

This stage considers whether the project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a European site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. The Stage 2 Appropriate Assessment comprises a scientific examination of the plan / project and the relevant European site; to identify and characterise any possible implications for the site in view of the site's conservation objectives, structure and function; taking account of in combination effects.

#### 3.1. Description of European Sites Potentially Affected

Potential impacts on the following European site have been identified. Full details of the site characteristics and reasons for designation can be found in the relevant most up to date site synopses on the NPWS website. Excerpts are provided as follows.

##### ***Dundalk Bay SAC (Site code 000455)***

Dundalk Bay, Co. Louth, is a very large open, shallow sea bay with extensive saltmarshes and intertidal sand/mudflats, extending some 16 km from Castletown River on the Cooley Peninsula in the north, to Annagassan/Salterstown in the south. The bay encompasses the mouths and estuaries of the Rivers Dee, Glyde, Fane, Castletown and Flurry.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

[1130] Estuaries

[1140] Tidal Mudflats and Sandflats

[1220] Perennial Vegetation of Stony Banks

[1310] *Salicornia* Mud

[1330] Atlantic Salt Meadows

[1410] Mediterranean Salt Meadows

The site is internationally important for waterfowl (numbers in brackets refers to the average maximum over the period 1994/95 to 1997/98) because it regularly holds over 20,000 birds (up to 57,000 have been recorded) and supports over 1% of the North-West European/East Atlantic Flyway populations of Brent Goose (366), Bar-tailed Godwit (2,312) and Knot (11,948). Additionally, it is nationally important for Golden Plover (4,266), Great Crested Grebe (193), Greylag Goose (312), Shelduck (463), Mallard (657), Pintail (100), Red-breasted Merganser (148), Oystercatcher (6,940), Grey Plover (218), Ringed Plover (133), Wigeon (565), Dunlin (9,112), Black-tailed Godwit (754), Curlew (1,593), Lapwing (4,822), Greenshank (20) and Redshank (1,455). Both Golden Plover and Bar-tailed Godwit are Annex I species.

The site has been designated a Special Protection Area (SPA) under the E.U. Birds Directive and it is also a designated Ramsar site.

This is a site of significant conservation value because it supports good examples of a range of coastal habitats listed on Annex I of the E.U. Habitats Directive, as well as large numbers of bird species, some of which are listed in the Birds Directive.

***Dundalk Bay SPA (Site code 004026)***

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Crested Grebe, Greylag Goose, Light-bellied Brent Goose, Shelduck, Teal, Mallard, Pintail, Common Scoter, Red-breasted Merganser, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Lapwing, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Black-headed Gull, Common Gull and Herring Gull. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Dundalk Bay SPA is one of the most important wintering waterfowl sites in the country and one of the few that regularly supports more than 20,000 waterbirds. Four species occur in numbers of international importance and a further 19 species in numbers of national importance. The regular occurrence of Golden Plover, Bar-tailed Godwit, Red-throated Diver, Great Northern Diver and Little Egret is of particular note as these species are listed on Annex I of the E.U. Birds Directive. Dundalk Bay is a Ramsar Convention site and parts of Dundalk Bay SPA are designated as Wildfowl Sanctuaries.

The location of the current development in relation to the European site is presented in Figures 3 and 4. The Qualifying Interests for the SAC are listed in Tables 2 and 3 below. Spatial boundary data on the Natura 2000 network were extracted from the NPWS website on 11 June 2020.

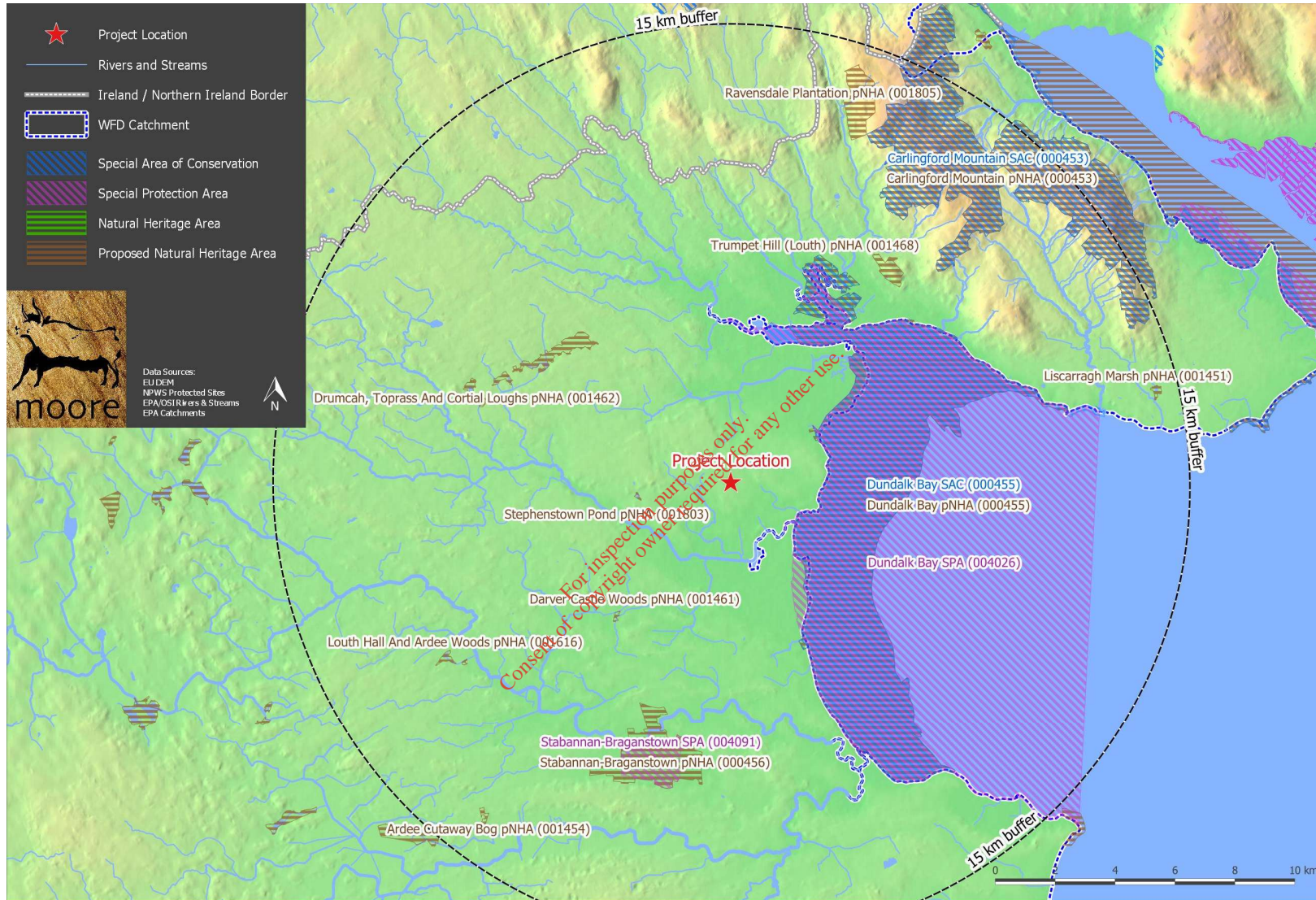


Figure 3. Showing the project site in relation to surrounding European Sites and possible supporting sites of conservation concern, NHAs and pNHAs.



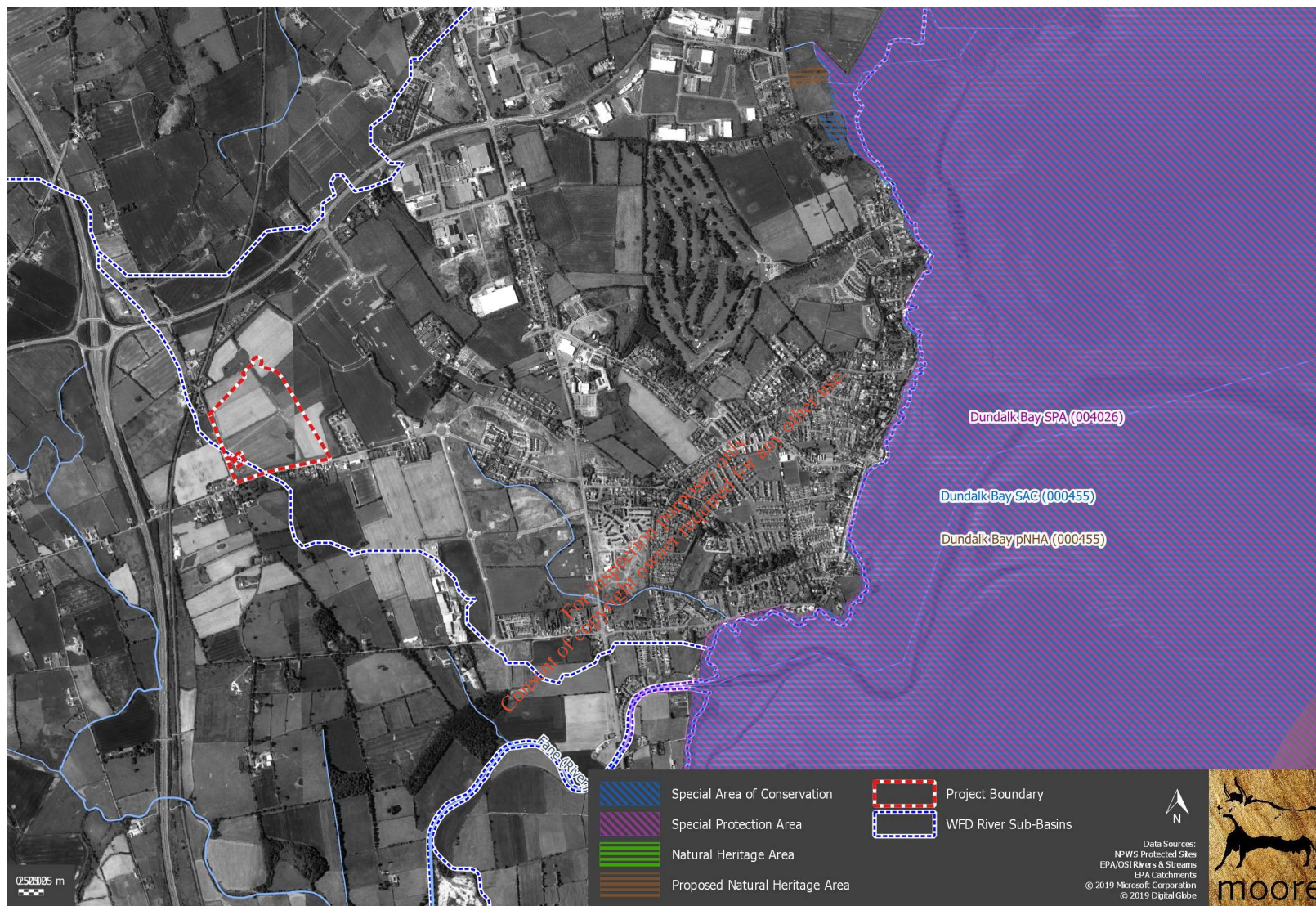


Figure 4. Detail of the project site in relation to the Dundalk Bay European sites.

Table 2 Qualifying Interests of the Dundalk Bay SAC (\*denotes a priority habitat).

| Site Name       | Site Code | Qualifying Interests  |
|-----------------|-----------|---|
| Dundalk Bay SAC | 000455    | 1130 Estuaries<br>1140 Mudflats and sandflats not covered by seawater at low tide<br>1220 Perennial vegetation of stony banks<br>1310 Salicornia and other annuals colonizing mud and sand<br>1330 Atlantic salt meadows ( <i>Glauco - Puccinellietalia maritimae</i> )<br>1410 Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) |

Table 3 Special Conservation Interests of the Dundalk Bay SPA.

| Site Code | Site Name       | Qualifying Habitats | Special Conservation Interests   |
|-----------|-----------------|---------------------|--|
| 004026    | Dundalk Bay SPA | A999 Wetlands       | A005 Great Crested Grebe <i>Podiceps cristatus</i> wintering<br>A043 Greylag Goose <i>Anser anser</i> wintering<br>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i> wintering<br>A048 Shelduck <i>Tadorna tadorna</i> wintering<br>A052 Teal <i>Anas crecca</i> wintering<br>A053 Mallard <i>Anas platyrhynchos</i> wintering<br>A054 Pintail <i>Anas acuta</i> wintering<br>A065 Common Scoter <i>Melanitta nigra</i> wintering<br>A069 Red-breasted Merganser <i>Mergus serrator</i> wintering<br>A130 Oystercatcher <i>Haematopus ostralegus</i> wintering<br>A137 Ringed Plover <i>Charadrius hiaticula</i> wintering<br>A140 Golden Plover <i>Pluvialis apricaria</i> wintering<br>A141 Grey Plover <i>Pluvialis squatarola</i> wintering<br>A142 Lapwing <i>Vanellus vanellus</i> wintering<br>A143 Knot <i>Calidris canutus</i> wintering<br>A149 Dunlin <i>Calidris alpina</i> wintering<br>A156 Black-tailed Godwit <i>Limosa limosa</i> wintering<br>A157 Bar-tailed Godwit <i>Limosa lapponica</i> wintering<br>A160 Curlew <i>Numenius arquata</i> wintering<br>A162 Redshank <i>Tringa totanus</i> wintering<br>A179 Black-headed Gull <i>Chroicocephalus ridibundus</i> wintering<br>A182 Common Gull <i>Larus canus</i> wintering<br>A184 Herring Gull <i>Larus argentatus</i> wintering |

## 3.2. Conservation Objectives of Natura 2000 Sites

### 3.2.1. Dundalk Bay SAC [000455]

The following Conservation Objectives are set out for the Dundalk Bay SAC (Version 1. 19<sup>th</sup> July 2011).

#### 1130 Estuaries

To maintain the favourable conservation condition of Estuaries in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

| Attribute              | Measure  | Target   | Notes   |
|------------------------|----------|--|---|
| Habitat area           | Hectares | The permanent habitat area is stable or increasing, subject to natural processes. See map 2    | Habitat area was estimated at 2799ha using OSI data and the defined Transitional Water Body area under the Water Framework Directive. See marine habitats supporting document for further information                                       |
| Community distribution | Hectares | The Subtidal fine sand community complex should be conserved in a natural condition. See map 4 | Habitat structure was elucidated from intertidal core and dig sampling undertaken in 2007 and 2008 combined with data obtained from subtidal grab samples obtained in 2009. See marine habitats supporting document for further information |

#### 1140 Mudflats and sandflats not covered by seawater at low tide

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide at Dundalk Bay SAC, which is defined by the following list of attributes and targets:

| Attribute              | Measure  | Target   | Notes   |
|------------------------|----------|--|---|
| Habitat area           | Hectares | The permanent habitat area is stable or increasing, subject to natural processes. See map 3                                    | Habitat area was estimated at 4375ha using OSI data. See marine habitats supporting document for further information  |
| Community distribution | Hectares | The Muddy fine sand community and Intertidal fine sand community complex should be conserved in a natural condition. See map 4 | Habitat structure was elucidated from intertidal core and dig sampling undertaken in 2007 and 2008 combined with data obtained from subtidal grab samples obtained in 2009. See marine habitats supporting document for further information |

## 1220 Perennial vegetation of stony banks

To maintain the favourable conservation condition of Perennial vegetation of stony banks in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

| Attribute   | Measure   | Target   | Notes  |
|---|---|--|--|
| Habitat area  | Hectares  | Area stable, subject to natural processes, including erosion and succession  | Exact current area unknown, but shingle is known to occur almost continuously from Salterstown to Lurgan White House in the south bay and from Jenkinstown to east of Giles Quay in the north bay. Shingle is estimated to cover 12ha. Probably less than 25% of this would be vegetated. See coastal habitats supporting document for further details |
| Habitat distribution  | Occurrence  | No decline, subject to natural processes   | See coastal habitats supporting document for further details   |
| Physical structure: Functionality and sediment supply       | Presence/absence of physical barriers                           | Maintain the natural circulation of sediment and organic matter, without any physical obstructions   | Based on data from the national shingle beach survey conducted in 1999 (Moore and Wilson, 1999). See coastal habitats supporting document for further details  |
| Vegetation structure: zonation                              | Occurrence  | Maintain range of habitat zonations including transitional zones, subject to natural processes including erosion and succession. See map 5   | Based on data from Moore and Wilson (1999). See coastal habitats supporting document for further details   |
| Vegetation composition: typical species and sub-communities | Percentage cover at a representative sample of monitoring stops | Maintain the presence of species-poor communities with characteristic species: <i>Honckenya peploides</i> , <i>Beta vulgaris</i> ssp. <i>maritima</i> , <i>Crithmum maritimum</i> , <i>Trifolium asperum maritimum</i> , <i>Glaucium flavum</i> and <i>Silene uniflora</i> | Based on data from Moore and Wilson (1999). See coastal habitats supporting document for further details   |
| Vegetation composition: negative indicator species          | Percentage cover  | Negative indicator species (including non-natives) to represent less than 5% cover   | Based on data from Moore and Wilson (1999). See coastal habitats supporting document for further details   |

**1310 Salicornia and other annuals colonizing mud and sand**

To restore the favourable conservation condition of *Salicornia* and other annuals colonizing mud and sand in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

| Attribute  | Measure   | Target  | Notes  |
|--|---|---|--|
| Habitat area   | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site surveyed: 35.00ha. See map 5                | Based on data from the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). One sub-site (Dundalk Bay) was mapped, giving a total estimated area of 35ha for <i>Salicornia</i> mudflat, which is one of the largest areas of this habitat in the country. NB further unsurveyed areas maybe present within the site. See coastal habitats supporting document for further details. |
| Habitat distribution   | Occurrence  | No decline, subject to natural processes. See map 5 for known distribution  | See coastal habitats supporting document for further details   |
| Physical structure: sediment supply  | Presence/absence of physical barriers                           | Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions   | See coastal habitats supporting document for further details   |
| Physical structure: creeks and pans  | Occurrence  | Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession  | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |
| Physical structure: flooding regime  | Hectares flooded; frequency                                     | Maintain natural tidal regime   | See coastal habitats supporting document for further details   |
| Vegetation structure: zonation   | Occurrence  | Maintain range of saltmarsh habitat zonation including transitional zones, subject to natural processes including erosion and succession. See map 5 | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |
| Vegetation structure: vegetation height                                    | Centimetres   | Maintain structural variation within sward  | Based on data from McCorry and Ryle (2009)   |
| Vegetation structure: vegetation cover                                     | Percentage cover at a representative sample of monitoring stops | Maintain more than 90% of area outside creeks vegetated   | Based on data from McCorry and Ryle (2009)   |
| Vegetation composition: typical species and sub-communities                | Percentage cover at a representative sample of monitoring stops | Maintain range of sub-communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)                         | See coastal habitats supporting document for further details   |
| Vegetation structure: negative indicator species - <i>Spartina anglica</i> | Hectares  | No significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |

### 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

To maintain the favourable conservation condition of Atlantic salt meadows in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

| Attribute   | Measure   | Target   | Notes  |
|---|---|--|--|
| Habitat area  | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For the sub-site (357.57ha) and potential areas (22.42ha) mapped: 379.98ha. See map 5 | Based on data from the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). One sub-site (Dundalk Bay) was mapped and additional areas of potential saltmarsh were identified from an examination of aerial photographs, giving a total estimated area for Atlantic salt meadow of 379.98ha. NB further unsurveyed areas maybe present within the site. See coastal habitats supporting document for further information |
| Habitat distribution  | Occurrence  | No decline, subject to natural processes. See map 5 for known distribution   | See coastal habitats supporting document for further details   |
| Physical structure: sediment supply                                       | Presence/absence of physical barriers                           | Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions  | See coastal habitats supporting document for further details   |
| Physical structure: creeks and pans                                       | Occurrence  | Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession.  | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |
| Physical structure: flooding regime                                       | Hectares flooded; frequency                                     | Maintain natural tidal regime  | See coastal habitats supporting document for further details   |
| Vegetation structure: zonation  | Occurrence  | Maintain range of saltmarsh habitat zonation including transitional zones, subject to natural processes including erosion and succession. See map 5                              | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |
| Vegetation structure: vegetation height                                   | Centimetres   | Maintain structural variation within sward   | Based on data from McCorry and Ryle (2009)   |
| Vegetation structure: vegetation cover                                    | Percentage cover at a representative sample of monitoring stops | Maintain more than 90% of area outside creeks vegetated  | Based on data from McCorry and Ryle (2009)   |
| Vegetation composition: typical species and sub-communities               | Percentage cover at a representative sample of monitoring stops | Maintain range of sub-communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)  | See coastal habitats supporting document for further details   |
| Vegetation structure: negative indicator species- <i>Spartina anglica</i> | Hectares  | No significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur                              | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |

**1410 Mediterranean salt meadows (*Juncetalia maritimi*)**

To maintain the favourable conservation condition of Mediterranean salt meadows in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

| Attribute   | Measure   | Target   | Notes  |
|---|---|--|--|
| Habitat area  | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: 0.045ha. See map 5                   | Based on data from the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). One sub-site (Dundalk Bay) was mapped, giving a total estimated area of 0.045ha for Mediterranean salt meadow. NB further unsurveyed areas maybe present within the site. See coastal habitats supporting document for further details |
| Habitat distribution  | Occurrence  | No decline, subject to natural processes. See map 5 for known distribution   | See coastal habitats supporting document for further details   |
| Physical structure: sediment supply                                       | Presence/absence of physical barriers                           | Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions  | See coastal habitats supporting document for further details   |
| Physical structure: creeks and pans                                       | Occurrence  | Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession   | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |
| Physical structure: flooding regime                                       | Hectares flooded; frequency                                     | Maintain natural tidal regime  | See coastal habitats supporting document for further details   |
| Vegetation structure: zonation  | Occurrence  | Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession. See map 5 | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |
| Vegetation structure: vegetation height                                   | Centimetres   | Maintain structural variation within sward   | Based on data from McCorry and Ryle (2009)   |
| Vegetation structure: vegetation cover                                    | Percentage cover at a representative sample of monitoring stops | Maintain more than 90% of area outside creeks vegetated  | Based on data from McCorry and Ryle (2009)   |
| Vegetation composition: typical species and sub-communities               | Percentage cover at a representative sample of monitoring stops | Maintain range of sub-communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)                          | See coastal habitats supporting document for further details   |
| Vegetation structure: negative indicator species- <i>Spartina anglica</i> | Hectares  | No significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur  | Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details   |

**3.2.2. Dundalk Bay SPA [004026]**

The following Conservation Objectives are set out for the Dundalk Bay SPA (Version 1. 19th July 2011).

To maintain the favourable conservation condition of [the bird species listed as Special Conservation Interests] in Dundalk Bay SPA, which is defined by the following attributes and targets:

| Attribute        | Measure                                      | Target   | Notes   |
|------------------|--|--|---|
| Population trend | Percentage change                            | Long term population trend stable or increasing  | Population trend assessment using (Generalised Additive Modelling (GAM)) could not be undertaken for this species due to an incomplete dataset. A measure of population change was calculated using the 'generic threshold' method. See Section 4 for more details of the SPA conservation objectives supporting document |
| Distribution     | Number and range of areas used by waterbirds | No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation | As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document  |

An additional specific conservation objective for wetlands is listed as follows.

### A999 Wetlands & Waterbirds

To maintain the favourable conservation condition of the wetland habitat in Dundalk Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. This is defined by the following attribute and target:

| Attribute    | Measure  | Target   | Notes   |
|--------------|----------|--|---|
| Habitat area | Hectares | The permanent area occupied by the wetland habitat is stable and not significantly less than the areas of 8136, 4374 and 649 hectares respectively for subtidal, intertidal and supratidal habitats, other than that occurring from natural patterns of variation. See map 6 | As defined by SPA boundary to MLWM; MLWM to MHW; and MHW to SPA boundary (the latter value is minus the area of Lurgangreen Fields) |

## 3.3. Consideration of Impacts on European Sites

### 3.3.1. Habitats Directive Annex 1 Habitats

There will be no direct impacts on the Dundalk Bay SAC or SPA and there will be no habitat loss or fragmentation as a result of the proposed development. Having considered direct impacts and ruling them out, indirect impacts are then considered.

A worst-case scenario may be considered whereby the Project may result in a significant detrimental change in water quality in Dundalk Bay either alone or in combination with other projects or plans as a result of indirect pollution. The effect would have to be considered in terms of changes in water quality which would affect the habitats or food sources for which the Dundalk Bay European sites are designated.



### 3.3.2. Birds Directive Annex I Species

The bird species of conservation concern for which Dundalk Bay SPA is designated rely on the presence of supporting habitats and foraging ground in term of the estuarine habitats and sand and mudflat habitats for which the SAC is designated.

The facility is at a distance of removal from Dundalk Bay such that the potential for noise or operation disturbance is not likely.

Similar to the potential for impacts on annexed habitats, a worst-case scenario may be considered whereby the Project may result in a significant detrimental change in water quality in Dundalk Bay either alone or in combination with other projects or plans as a result of indirect pollution. The effect would have to be considered in terms of changes in water quality which would affect the habitats or food sources for which the Dundalk Bay European sites are designated.

### 3.3.3. Ecological Network Supporting Natura 2000 Sites

An analysis of the proposed Natural Heritage Areas and designated Natural Heritage Areas in terms of their role in supporting the species using Natura 2000 sites was undertaken. These supporting roles mainly relate to mobile fauna such as mammals and birds which may use pNHAs and NHAs as “stepping stones” between Natura 2000 sites.

Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account during the AA process.

There are no other designated or proposed designated sites or areas of semi-natural habitat that would be affected by the proposed development.

Dundalk Bay is also a proposed Natural Heritage Area (Site Code 000455). However, for the purposes of this NIS this area is dealt with under its higher conservation status designations as European sites.

There are no other areas of natural or semi-natural ecological value that would be affected by the proposed project.

### 3.4. Impacts on the Qualifying Interests of European Sites

#### 3.4.1. Direct Impacts

There will be no direct impacts on the SAC or SPA as a result of the construction and operation of the proposed project. Direct impact refers to physical impacts defined in the Departmental Guidance as 'Loss of habitat area' and/or 'Habitat Fragmentation'. There are no direct impacts identified which may affect the Annex 1 habitats and Annex II species of the SAC or SPA. The proposed development will have **no impacts** upon the integrity or the site structure of the Dundalk Bay SAC or Dundalk Bay SPA.

Having established this, the assessment emphasis is placed on potential indirect and cumulative impacts.

The primary consideration in terms of source-vector-pathways for indirect impacts relates to waste water and potential indirect impacts on hydrologically linked habitats and species.

#### 3.4.2. Indirect Impacts

The potential for impact is considered whereby the project would result in a significant detrimental change in water quality either alone or in combination with other projects or plans as a result of indirect pollution of surface water. The effect would have to be considered in terms of changes in water quality which would affect the habitats or species for which the Dundalk Bay European sites are designated.

##### Consideration of impacts on Surface Water

Domestic foul wastewater is discharged to public sewer for treatment at Dundalk Wastewater Treatment Plant.

Process and Utilities wastewater (1,185m<sup>3</sup>/day) is treated on site at the Wastewater Neutralisation Plant (WWNP), where they are neutralised prior to discharge to the public sewer for treatment at Dundalk Wastewater Treatment Plant. Any wastewater which has been in contact with biological materials will also be deactivated prior to being sent to the WWNP. This is facilitated by passing all biological wastewaters through a heat inactivation skid to deactivate all biological components.

It must be demonstrated that the level of treatment of an installation's effluent, on and off site, is collectively equivalent to BAT and environmental quality standards will be observed in the receiving water (i.e., 'equivalent level of protection').

BAT AELs from the Sectorial BAT document, namely the EU Decision BAT Conclusions on Waste Water and Waste Gas Treatment / Management Systems in the Chemical Sector, applies AELs for direct

discharges from an installation's biological treatment plant to a surface water body. The EU Reference Document on BAT for the Manufacture of Organic Fine Chemicals (2006) may also apply.

The relevant sectorial BAT-AELs do not apply as the facility does not discharge directly into a waterbody. Process wastewater is further treated in the Dundalk Wastewater Treatment Plant. The proposed ELVs for the facility will be discussed with Irish Water prior to operation. It is therefore anticipated that the resulting treatment of the discharge will be in accordance with the ELVs in the discharge licence for Dundalk WWTP. The ELVs in the Dundalk WWTP discharge licence complies with the relevant BAT limits.

The proposed facility will contribute 5.9 % of the total influent to the Dundalk wastewater treatment plant. The proposed values will be discussed with Irish Water and will be agreed with regards to the impact on Dundalk.

The main issue at Dundalk WWTP as highlighted in their latest AER (2017) is Total Phosphorus and Total Nitrogen, however it was noted that they planned to have ferric dosing added to the plant by Q4 of 2018. The Total P concentration anticipated is 312 mg/L which, once diluted (at a dilution factor of 42.29) will contribute 7.38 mg /L to the total influent to the facility. The Total N concentration anticipated is 264 mg/L which, once diluted (at a dilution factor of 42.29) will contribute 6.24 mg /L to the total influent to the facility. It is anticipated that the Dundalk treatment plant will be able to assimilate this contribution.

The treatment plant is currently undergoing modifications to bring it into compliance with its licence, including aeration, ferric dosing and a stormwater balance tank specifically to facilitate this application. Once compliant, the discharge from this facility will be in line with BAT.

Discharges from the treatment plant are subject to further dilution in the near field mixing zone which combined with the upgrades within the plant is sufficient for achieving the water quality standards from S.I. 272 of 2009.

### 3.5. Mitigation Measures

There are no specific mitigation measures to be employed other than the appropriate management of waste water and any required monitoring under the conditions of licenced discharge.

### 3.6. Assessment of In-Combination Effects

The Commission services' interpretation document 'Managing Natura 2000 sites' referred to as MN2000, makes clear that the phrase 'in combination with other plans or projects' in Article 3(3) refers

to cumulative effects caused by the projects or plans that are currently under consideration together with the effects of any existing or proposed projects or plans. When impacts are assessed in combination in this way, it can be established whether or not there may be, overall, an impact which may have significant effects on a Natura 2000 site or which may adversely affect the integrity of a site.

As part of the Appropriate Assessment, in addition to the proposed works, other relevant projects and plans in the region must also be considered at this stage. This step aims to identify at this early stage any possible significant in-combination or cumulative effects / impacts of the proposed development with other such plans and projects on the Natura 2000 site.

### 3.6.1. Consideration of Projects

The following table outlines the existing planning permission relating to the site:

| Planning Reference<br>Location                               | Applicant  | Development Description  | Decision & Decision Date                      |
|--|------------|--|---|
| 99/433<br>IDA Ireland<br>Mullagharlin,<br>Townlands, Dundalk | Haynestown | Site development and landscape works (environmental impact statement submitted)  | Granted with Conditions<br>June 23, 1999      |
| 02/886<br>IDA Ireland<br>Haynestown House,<br>Dundalk        |            | Demolish two storey dwellinghouse, associated out buildings & sheds  | Granted with Conditions<br>September 17, 2002 |
| 08/822<br>IDA Ireland<br>Mullagharlin,<br>Townlands, Dundalk | Haynestown | Permission to develop an Advance Biopharmaceutical and Knowledge Industry Campus to include the construction of two advance manufacturing facilities to accommodate biopharmaceutical administration, research and support activities at the existing IDA site of 48.18ha area at Mullagharlin and Haynestown Townlands, Dundalk, Co. Louth. The biopharma manufacturing facilities with associated research and knowledge industry campus will consist of a medium to large scale biopharmaceutical manufacturing facility consisting of four storey development with plant room, approx 29,300sqm, a two storey development with plant room, part two storey warehouse, two 3storey utility buildings, two 4storey and 3storey offices, cafeteria all with a gross floor area of circa 57,700sqm. A small to medium scale biopharmaceutical manufacturing facility consisting of a primary | Granted with Conditions<br>November 14, 2008  |

|  |  |  |
|--|--|--|
|  | <p>manufacturing facility approx 13,000sqm, 2storey manufacturing facility with plant room, part 2storey warehouse, a single storey building, one 3storey office/laboratory building, cafeteria all with a gross floor area of circa 23,350sqm. Both facilities shall include single storey pumphouses, utility yards and process water, waste water and miscellaneous bunded tanks, pipe bridges, miscellaneous items of external plant and equipment, 32m high discharge stacks and landscape features and associated car parking, internal roads, fencing, site lighting and utilities. The IDA advance facilities development proposals also include six 2storey office buildings with plant rooms, single storey security building, single storey 110kva sub-station with external transformers in compound area, 3 high tension electrical sub-stations, single storey water pumphouse, complete road network, car parking for circa 1,050cars, a series of internal vehicular and pedestrian entrances, site lighting, signage and flagpoles, extensive planted berm structures 5-12m high, decorative and surface water attenuation ponds, underground and overground services. A main estate entrance with signage and sculpture features, bus shelter/stops, site fencing and landscaping, cycle paths, footpaths, tree and shrub planting, external lighting and site furniture shall be constructed as part of site works. The facilities together with site infrastructure will be built in phases according to need during the 10 year permission lifetime sought by this planning application</p> |  |
| <p>17/628<br/>IDA Ireland<br/>Haynestown, Co. Louth,</p>   | <p>The development will consist of the construction of a viewing platform (71sq meters) and all associated site works. The purpose of the viewing platform is to allow potential investors of the IDA lands a birds-eye view of the entire lands and to allow</p>  | <p>Conditional<br/>October 5, 2017</p>               |
| <p>18/187<br/>IDA Ireland<br/>IDA Science and Technology Park,<br/>Mullagharlin,Dundalk</p>          | <p>Extension of Duration: Parent ref: 08/822</p>   | <p>Granted with Conditions<br/>March 23, 2018</p>    |
| <p>18/817<br/>Wuxi Biologics Ltd<br/>Mullagharlin and Haynestown<br/>townlands, Dundalk,Co Louth</p> | <p>The application seeks amendments to the permitted development (LCC Reg. Ref. 08/822), which has been extended in duration under Reg. Ref.18/187) and relate to the medium to large scale biopharmaceutical manufacturing facility, referred to as site 2 in the planning permission. The area of the overall site subject to amendments in this application is c.20.74 hectares. The overall GFA of buildings on site 2 is proposed to reduce from 57,700m<sup>2</sup> to 54,232m<sup>2</sup>. See Site Notice for Comprehensive Description of Amendments.</p>   | <p>Granted with Conditions<br/>November 27, 2018</p> |

The LCC Planning Department website was consulted in order to generate a list of relevant planning permissions from the surrounding areas of the proposed development within the surrounding area. The outcome of this search is presented in the table below:

| <b>Planning Reference</b> | <b>Applicant</b>  | <b>Development Description</b>   | <b>Decision &amp; Decision Date</b>         |
|---------------------------|---|--|---|
| <b>Location</b>           |   |  |   |
| 98/986                    | Xerox Europe Ltd.<br>Mullagharlin/Haggardstown  | Site Development Works for Proposed Industrial Development.  | 18 November 1998                            |
| 98/1067                   | Xerox Europe Ltd.<br>Mullagharlin/Haggardstown  | Hardware Facility on Proposed Industrial Development.  | 9 December 1998                             |
| 98/1149                   | XEROX Europe Ltd<br>Mullagharlin/Haggardstown,<br>Dundalk, Co Louth                             | Toner Manufacturing Facility.  | Granted with Conditions<br>24 December 1998 |
| 981210                    | XEROX Europe Ltd<br>Mullagharlin/Haggardstown,<br>Dundalk, Co Louth                             | Electronics Facility   | 27 January 1999                             |
| 04441                     | John McCann<br>Haggardstown, Dublin Road,<br>Dundalk, Co. Louth                                 | The development will consist of a distribution facility 16,287m sq with an attached 2 storey office block 1,214m sq and associated car parking, lorry parking and turning and provision of access roads with associated site development works                                     | 18 June 2004                                |
| 05152                     | James Hanlon<br>Site adjacent to, Xerox Technology<br>Park, Haggardstown, Dublin Rd,<br>Dundalk | The development will consist of a distribution facility 5,472 m sq with an attached 2 storey office block 310m sq and associated car parking, lorry parking and turning and provision of entrance roads with associated site development works, landscaping and boundary treatment | 11 April 2005                               |

|   |  |   |
|---|--|---|
| <p>10117</p> <p>Galen (Chemicals) Ltd</p> <p>Building B,, Xerox Technology Park, Dublin Road, Dundalk</p>   | <p>Permission for demolition of c.20m<sup>2</sup> at rear of existing warehouse &amp; construction of new c.265m<sup>2</sup> single storey data centre with link corridor &amp; associated 300m<sup>2</sup> external &amp; c.37m<sup>2</sup> internal plant areas to the rear of the existing building. The development shall also include associated site development works &amp; landscaping all on site of c.1.85ha</p>   | <p>Granted with Conditions</p> <p>12 May 2010</p>     |
| <p>10118</p> <p>Galen (Chemicals) Ltd</p> <p>Building B,, Xerox Technology Park, Dublin Road, Dundalk</p>   | <p>Permission for renovation &amp; extension of an existing manufacturing building to include alteration to existing facades construction of a new rooflight, change of use from manufacturing &amp; warehouse to laboratory &amp; office of c.1159m<sup>2</sup> at ground floor level &amp; construction of new warehouse area of c162m<sup>2</sup> at first floor level. The development shall also include associated site development works, waste management &amp; storage area, parking &amp; landscaping all on a site of 1.85ha</p>  | <p>12 May 2010</p>                                    |
| <p>09/846</p> <p>Ramparts Property Services</p> <p>Xerox Technology Park, Dublin Road, Dundalk, Co Louth</p>  | <p>Permission for renovation and extension of an existing manufacturing building to include demolition of existing link corridor to adjacent building, alteration of existing facades, construction of a new rooflight, construction of new reception area, provision of an additional c70sqm office area and change of use from manufacturing to laboratory and office of c965sqm at ground floor level, construction of new 1020sqm office area at first floor level. The development shall include a new vehicular access point from existing road, external signage, associated site development works, parking and landscaping all on site of c1.85ha at Building B</p>   | <p>Granted with Conditions</p> <p>1 February 2010</p> |
| <p>10331</p> <p>Galen (Chemicals) Ltd</p> <p>Building B,, Xerox Technology Park, Dublin Road, Dundalk County Louth</p>                                | <p>Permission for extension of an existing manufacturing building to include alterations of existing facades, construction of new single storey warehouse area of c. 215m<sup>2</sup> at ground floor level &amp; alterations to permitted external secure store &amp; waste management areas. The development shall also include associated site development works, parking &amp; landscaping all on a site of c1.85ha</p>  | <p>3 Sep 2010</p>                                     |
| <p>12204</p> <p>PayPal Europe Services Ltd.</p> <p>Xerox Building A Xerox Technology Park, Haggardstown, Southern Link Road, Dundalk County Louth</p> | <p>Permission for change of use, increase in internal area &amp; modifications to the existing Xerox Building A. The proposed development will consist of the change of use of the existing production facility &amp; existing high bay warehouse of 6880m<sup>2</sup> &amp; existing plant room areas of 873m<sup>2</sup> to general office use. The increase floor area &amp; modifications are comprised of:<br/> Provision of additional general office space on a new first floor mezzanine of 903m<sup>2</sup> located in the previous production hall &amp; high bay warehouse areas. Provision of new office area of 768m<sup>2</sup> in the location of the existing first floor plant room with associated curtain walling glazing &amp; external amenity terrace to the west. The total floor area of the modified building will be 12,809m<sup>2</sup> (GIA). The provision of curtain walling, new doors &amp; solar control baffles to the existing north, south, east &amp; west facades. The provision of north light - roof lights to the roof of the proposed new office area. The provision of a new entrance canopy &amp; staff entrance canopy to the main entrance facade. The provision of 289 additional car parking spaces increasing the total number from 331 spaces to 620 spaces. Provision of 120 secure cycling spaces, 5 no. smoking shelters &amp; 5 no. flag</p> | <p>8 June 2012</p>                                    |

|  |   |  |
|--|---|--|
|  | poles of 9m in height, 4 no. signs fixed to the north & east elevations & a new sign mounted on the existing signage pillar at the entrance to the site, external leisure amenities including a hard court play area, external hard & soft landscaping & associated ancillary work, plant & services. The application includes the part demolition of the existing link building and the provision of additional internal & external fire escape staircases.  |  |
| 12/451<br>IDA Ireland<br>Mullagharlin, Dundalk, County Louth   | Permission for the erection of 1 no wind turbine with hub height of up to 65m, blade radius of up to 28m & overall height from ground to tip of blade of up to 88.5m, construction of 1 no electrical substation, internal site tracks & all other associated works. An Environmental Report & Natura Impact Statement will be submitted to the Planning Authority  | Granted with Conditions<br><br>November 19, 2012 |
| 13481<br>PayPal Europe Services Ltd.<br><br>Xerox Technology Park,<br>Haggardstown, Southern Link Road,<br>Dundalk County Louth  | Permission for a secure covered shelter for 120 bicycles to the rear of the PayPal / eBay Building  | 18 December 2013                                 |
| 14436<br>Hughes Transport<br><br>Site No.2, Dundalk Logistics Park,<br>Xerox Technology Park, Dublin Road,<br>Dundalk, Co. Louth | Permission for a proposed logistic warehouse of 1352m <sup>2</sup> in floor area and 11.062m high with associated vehicular parking, new 2.4 high paladin boundary fence. New site entrance to existing internal access road and all associated site development works.   | 8 January 2015                                   |
| 17/898<br>Wasdell Europe Ltd.<br><br>Mullagharlin Dundalk Co Louth   | Permission to construct an Advanced Technology Unit light industrial building for internationally traded contract packaging, storage and distribution of 8230m <sup>2</sup> , all ancillary car parking, bicycle parking, loading areas, landscaping, internal roads, ESB substation, drainage and ancillary works on a site of 2.93ha within the overall lands of IDA Dundalk Science and Technology Park.   | Granted with Conditions<br><br>January 19, 2017  |
| 19/232<br>IDA Ireland<br><br>Dundalk Science & Technology Park<br>Mullagharlin Dundalk Co Louth                                  | Permission for a new Advance Technology Building. Permission is also sought for signage, new timber post and rail site boundaries, car parking, cycle shelter, landscaping, underground water storage tank, ESB substation / switch room and all associated site works. The development has been the subject of Screening for Appropriate Assessment and Natura Impact Statement in accordance with Part XAB of the Planning and Development Act 2000 (as amended) and under Regulation 42 of the Birds and Natural Habitats Regulations 2011 (as amended). | Further Information requested.                   |
| 19861<br>WuXi Vaccines Ireland Ltd.  | Permission for development of site at Mullagharlin/Haggardstown townlands, located on the IDA Ireland Dundalk Science and Technology Park. The overall site is accessed off the R215, the Southern Link Road and is   | 10/12/2019                                       |



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| <p>Mullagharlin/Haynestown<br/>Dundalk<br/>Co Louth</p>  | <p>generally south and east of Mullagharlin Road, north of the Marlbog Road and generally north and west of the Brookfield residential development. The proposed development consists of an integrated Pharmaceutical manufacturing facility located directly north of Wuxi Biopharmaceutical campus currently under construction. The proposed development comprises of the following: 1. A three storey Pharmaceutical manufacturing facility sized approximately 15,520 square metres and approximately 26 metres high and with roof mounted plant and equipment and stacks. 2. A four storey Administration and Laboratory building sized 8,789 square metres and approximately 22.5 metres high and with roof mounted plant and equipment and stacks. 3. A two storey modular support laboratory sized approximately 820 square metres and approximately 10.1 metres high and with roof mounted plant and equipment and stacks. 4. A single storey boiler unit area sized approximately 864 square metres and 9.6 metres high including two boiler stacks approximately 31 metres high. 5. 4 no. modular plant and equipment storage units sized approximately 35 square metres and 3 metres high per unit. 6. A single storey drum store sized approximately 75 square metres and 6 metres high. 7. A single storey waste store sized approximately 75 square metres and 6 metres high. 8. Site works including car park for 278 cars, docking areas, yard areas housing external plant, tanks and equipment, a large landscaped berm to the north and west of the facility, a surface water attenuation pond, roads and underground services, external lighting, security fencing, fire water tanks and modular housing for pumps, 2 no. vehicular entrances off the previously permitted internal road access currently under construction, bicycle shelters and facilities for E-car charging and disabled parking as well as all associated site works and landscaping. This application consists of development for an activity for which a licence under Part IV of the Environmental Protection Agency Act 1992, is required. An EIAR and Natura Impact Statement accompany this application.</p> |                   |
| <p>20148<br/><br/>WuXi Vaccines Ireland Ltd.<br/><br/>Mullagharlin/Haynestown<br/>Dundalk<br/>Co Louth</p> | <p>Permission for revision and reconfiguration to the existing Planning Permission (Reg. Ref. No. 19/861) necessitated by a strategic, phased approach to construction of the permitted development envelope. The proposed development comprises: (1) A three storey biopharmaceutical manufacturing facility (sized approximately 10,275 square metres) with four storey administration and laboratory building (sized approximately 5,754 square metres) all approximately 25 metres high and with roof mounted plant and equipment and stacks. (2) A single storey canteen with pedestrian link sized approximately 600 square metres and approximately 6.0 metres high. (3) Modifications will include revised and reconfigured internal layouts and elevations necessitated by the proposed strategic phased approach. (4) Relocation of 4 no. modular plant and equipment storage units sized approximately 45 square metres and 5 metres high per unit. (5) Relocation of 1 no. single storey drum store sized approximately 50 square metres and 6 metres high. (6) Relocation of 1 no. single storey waste store sized approximately 40 square metres and 5 metres high. (7) A new single storey electrical/transformer room approximately 100 square metres and 5 metres high. (8) A relocated single storey water pump house 140 square metres 6metres high with sprinkler tank 8 metres diameter 14 metres high and city water tank 10 metres diameter 15 metres high. (9) Siteworks</p>   | <p>12/06/2020</p> |

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|  | <p>including car park for 204 cars, docking areas, yard areas housing external plant, tanks and equipment, a large landscaped berm to the north and west of the facility, a surface water attenuation pond, roads and underground services, external lighting, security fencing, 2 no. vehicular entrances off the previously permitted internal road access currently under construction, bicycle shelters and facilities for E-car charging and disabled parking as well as all associated site works and landscaping. This application consists of a variation to a previously permitted development for an activity for which a licence under Part IV of the Environmental Protection Agency Act 1992 (as amended by the Protection of the Environment Act, 2003) is required. A Natura Impact Statement (NIS) accompanies this application</p> |  |
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### 3.6.2. Conclusion of In-combination Effects

There are no predicted in-combination effects given the proposed Project will have no significant impacts in terms of wastewater, surface water or emissions to air.

The Louth County Development Plan in complying with the requirements of the Habitats Directive requires that all Projects and Plans that could affect the Natura 2000 sites in the same zone of impact of the Project site would be initially screened for Appropriate Assessment and if requiring Stage 2 AA, that appropriate employable mitigation measures would be put in place to avoid, reduce or ameliorate negative impacts. In this way any, in-combination impacts with Plans or Projects for the development area and surrounding townlands in which the development site is located, would be avoided.

Any new applications for the Project area will be assessed on a case by case basis by Louth County Council which will determine the requirement for AA Screening as per the requirements of Article 6(3) of the Habitats Directive.

Having regard to the determination that the proposed project will not have any direct impacts on the Dundalk Bay European sites and that indirect impacts will be avoided through appropriate treatment of wastewater prior to discharge, with no predicted impacts on the conservation objectives of the Dundalk Bay European sites, it can be concluded that there will be no significant cumulative impacts in terms of the proposed project or from another other plans or projects in the development area.

## 4. Natura Impact Statement & Conclusion

This NIS has reviewed the predicted impacts arising from the Project and found that with the implementation of appropriate best practice measures specifically with regard to the treatment of waste water, significant effects on the integrity of the Dundalk Bay SAC and the Dundalk Bay SPA can be ruled out.

It is the conclusion of this NIS, on the basis of the best scientific knowledge available, and subject to the implementation of the appropriate treatment of waste water, that the possibility of any adverse effects on the integrity of the European Sites considered in this NIS, or on the integrity of any other European Site (having regard to their conservation objectives,) arising from the Project, either alone or in combination with other plans or projects, can be excluded beyond a reasonable scientific doubt.

## 5. References

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European Commission (2000) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

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NPWS (2020) National Parks and Wildlife Service Metadata available online at <https://www.npws.ie/maps-and-data>