



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

SUBJECT: Consent Order and Agreement
Pre-Design Investigation & Preparation
Of Cleanup Plan Detailed Designs
American/Zinc & Chemical Site

TO: Terry Goodwald
Environmental Program Specialist
SWRO/ECB/HSCA Program

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SWRO/ECB/HSCA Program

FROM: Donna Watson
Administrative Officer
Program Development Section *dw*

DATE: June 22, 2015

Attached is the fully executed Consent Order and Agreement between the Commonwealth of PA (COP), acting through the Department of Environmental Protection (DEP) and Cyprus Amax Minerals Company (Cyprus) in the matter of American Zinc and Chemical Site.

Please note the SAP document number is (SAP#4000019494), vendor ID number 759194 and the appropriate SAP funding coding can be found on the last page of the attached document.

Contact me if you have questions.

Thanks!

Enclosure

cc: Comptroller's Office
AZC CO&A File [D. Watson]

510-17 ("Administrative Code"); and the rules and regulations ("rules and regulations") promulgated thereunder.

Background

B. Cyprus is a wholly owned subsidiary of Freeport Minerals Corporation, a wholly owned subsidiary of Freeport-McMoRan Inc., with a business address at 333 North Central Avenue, Phoenix, Arizona.

C. The site ("Site") includes approximately 157 acres and is located in Smith Township, Washington County, Pennsylvania. The Site is situated near the Borough of Burgettstown, to the southeast of the town of Langeloth and west of the town of Slovan and State Route 18. A map of the Site is attached hereto as Exhibit A.

D. Burgetts Fork flows along the eastern Site boundary, into Racoon Creek approximately 2.5 miles from the Site, and then into the Ohio River approximately 15 miles from the Site. Additional surface water at or near the Site includes a breached dam containing water, located near the southern Site boundary; an unnamed tributary to Burgetts Fork in the northern portion of the Site; an unnamed tributary to Burgetts Fork near the southeastern Site boundary; and a seep originating in the southern portion of the Site and flowing into the southeastern unnamed tributary. There is a mine drainage passive wetland treatment pond near the southern Site boundary. Approximately one-quarter acre of wetland is located in the southeastern portion of the Site.

E. Beginning in 1913, American Zinc and Chemical Company ("AZC") owned the Site and operated there a coal-fired zinc smelter facility. To supply its smelter operation, AZC deep-mined coal under portions of the Site. AZC ended its zinc smelter operations at the Site in 1947; it ended its operation of an acid plant and residue mill at the Site in early 1948. During its operations, AZC disposed of various waste at the Site, including but not limited to slag; discarded retorts and condensers; brick; coal ash; and construction debris.

F. Beginning in late 1947 and continuing into 1950, AZC sold various portions of the Site, ultimately selling all of its property interests there. After liquidating all of its property interests at the Site, AZC was dissolved as a Pennsylvania corporation in 1951.

G. From 1915 until its 1951 dissolution, AZC was a wholly owned subsidiary of American Metal Company, Ltd. ("AMCo"), incorporated in New York in 1887.

H. The Department believes that, from 1915 through early 1948, through its subsidiary AZC, AMCo managed, directed and conducted operations at the Site, including those related to the zinc smelter facility, the acid plant, the residue mill, and coal mining that ultimately resulted in Site contamination and, further, that AMCo was the decision-maker regarding whether and how those operations would comply with environmental regulations, including how waste from the operations was disposed of at the Site and whether and how resulting contamination was addressed.

I. AMCo merged with Climax Molybdenum Company in 1957 and became known as American Metal Climax, Inc. In 1974, American Metal Climax, Inc. changed its name to AMAX, Inc. In 1993, Cyprus Minerals Company merged with AMAX, Inc. to form Cyprus Amax Minerals Company. In 1999, C.A.V. Corporation, a wholly owned subsidiary of Freeport-McMoRan Corporation (formerly Phelps Dodge Corporation), acquired the stock of Cyprus Amax Minerals Company. C.A.V. Corporation was then renamed Cyprus Amax Minerals Company. Recently, Freeport-McMoRan Corporation, a New York corporation, merged with and into Freeport-McMoRan Corporation, a Delaware corporation, and then changed its name to Freeport Minerals Corporation.

J. Bologna Coal Company owns approximately 89 of the approximately 157 acres comprising the Site. Peterson Industries, Inc. owns approximately 26 acres of the Site, and

Langeloth Metallurgical Company, L.L.C. owns approximately 38 acres. Smith Township owns approximately 4 acres.

K. Two individual parcels make up the approximately 38 acres of the Site presently owned by Langeloth Metallurgical Company, L.L.C. At various times between 1953 and 1993, each of the parcels was owned by Climax Molybdenum Company, AMAX, Inc., or both.

Site Investigations

L. The Site is characterized by an irregular ground surface, much of it barren; large waste piles; dilapidated buildings; and large concrete foundations, both in and out of place. The portion of the Site owned by Langeloth Metallurgical Company, L.L.C. has been graded, covered with soil and seeded.

M. Environmental investigations of the Site include those conducted by Magee and Edmiston in 1987; by Wagh in 1993; by the S.M. Stoller Corporation in 1994; by the Department in 1999 and 2000; and by Brown and Caldwell in 2002 and 2010-2012.

N. During its investigation in 1987, Magee and Edmiston delineated nine waste areas at the Site and estimated a volume of total waste in excess of 349,000 cubic yards.

O. During its investigations in 1999 and 2000, the Department sampled Site soil, waste, sediments and surface water. Analysis of the Department's soil and waste samples showed exceedances of Act 2 Non-Residential Statewide Health standards for lead, arsenic, cadmium, zinc, copper, tin and antimony. Analysis of the Department's sediment samples showed the presence of lead, cadmium, antimony and arsenic. In addition, one of the Department's sediment samples showed low-level polychlorinated biphenyls ("PCBs"). Analysis of the Department's surface water samples showed an increase in lead, zinc, cadmium, cobalt, copper, arsenic and nickel between points upstream and downstream from the Site.

P. During its investigation in 2002, Brown and Caldwell sampled Site groundwater and surface water. Analysis of Brown and Caldwell's groundwater samples showed exceedances of Act 2 Used Aquifer Medium-Specific Concentration standards for total arsenic, cadmium, copper, lead and zinc. Analysis of Brown and Caldwell's surface water samples showed zinc in downstream Burgetts Fork.

Cyprus' Liability

Q. The substances described in Paragraphs O and P contain "hazardous substances," as that term is defined in Section 103 of HSCA, 35 P.S. § 6020.103 and 42 U.S.C. § 9601.

R. Past and present conditions at the Site constitute a "release" or threatened "release" of "hazardous substances," as those terms are defined in Section 103 of HSCA, 35 P.S. § 6020.103 and 42 U.S.C. § 9601.

S. As an area where hazardous substances have been released, the Site is a "site," as that term is defined in Section 103 of HSCA, 35 P.S. § 6020.103 and 42 U.S.C. § 9601.

T. The past and present release and threatened release of hazardous substances at the Site constitutes a "public nuisance" pursuant to Section 1101 of HSCA, 35 P.S. § 6020.1101.

U. During the course of the Site's investigation and remediation, the Department anticipates incurring "response" costs, as that term is defined in Section 103 of HSCA, 35 P.S. § 6020.103.

V. The Department believes that, as the successor in interest to the "operator" of a "site" at the time of a "release" or threatened "release" of "hazardous substances," Cyprus is a "responsible person" as those terms are defined in Section 103 of HSCA, 35 P.S. § 6020.103, and as those terms are used in Section 701 of HSCA, 35 P.S. § 6020.701 and 42 U.S.C. § 9607, with respect to the release and threatened release of hazardous substances at the Site in its entirety.

W. The Department believes that, as the successor in interest to the "owner" of a "site" at the time of a "release" or threatened "release" of "hazardous substances," Cyprus is a "responsible person" as those terms are defined in Section 103 of HSCA, 35 P.S. § 6020.103, and as those terms are used in Section 701 of HSCA, 35 P.S. § 6020.701 and 42 U.S.C. § 9607, with respect to the release and threatened release of hazardous substances at the portion of the Site comprised of the approximately 38 acres of the Site owned by Langeloth Metallurgical Company, L.L.C.

X. The Department believes that Cyprus is strictly and jointly and severally liable for response costs, damages and any applicable interest which result from the release or threatened release of hazardous substances at the Site, pursuant to Sections 6020.702(a) and (b) of HSCA, 35 P.S. § 6020.702(a) and (b).

Settlement

Y. The Department and Cyprus have engaged in extensive negotiation over settlement of the Department's potential claims against Cyprus as to the remedial investigation and cleanup of the Site.

Z. The Department has elected to enter into a settlement with Cyprus to share with Cyprus the funding of a portion of the Site's remedial investigation, cleanup and post-remediation care. At the same time, the Department and Cyprus each reserve their respective rights to seek cost recovery and contribution from other parties not participating in this CO&A.

AA. In essence, the Department's settlement with Cyprus calls for: (a) Cyprus' undertaking the remedial investigation, cleanup and post-remediation care of the Site; (b) Cyprus' payment of 100% of the remedial investigation, cleanup and post-remediation care costs associated with two parcels of the Site owned by Langeloth Metallurgical Company, L.L.C. and totaling approximately 38 acres; and (c) Cyprus' payment of 60% and the Department's payment, from the Pennsylvania Hazardous Sites Cleanup Fund, of 40% of the remedial investigation,

cleanup and post-remediation care costs associated with the approximately 119 acres making up the balance of the Site, including a portion of one parcel and the whole of a second parcel owned by Bologna Coal Company and totaling approximately 89 acres, a portion of one parcel owned by Peterson Industries, Inc. totaling approximately 26 acres and, as well, three parcels owned by Smith Township and totaling approximately 4 acres.

BB. The Parties intend to memorialize their settlement in three individual consent order and agreements. The Parties executed the first consent order and agreement on June 9, 2009, to memorialize the Parties' agreement as to the remedial investigation of the Site and the development of a plan for the Site's cleanup. The second consent order and agreement, set forth herein, will memorialize the Parties' agreement as to the finalization and implementation of the Pre-Design Investigation Work Plan and the Cleanup Plan Detailed Designs. The Parties intend that the future third consent order and agreement will memorialize the Parties' agreement as to implementation of the Cleanup Plan Detailed Designs using the same cost-sharing allocation set forth in Paragraph AA.

CC. Cyprus has submitted for the Department's review and approval a Remedial Investigation Work Plan ("RIWP"), a Remedial Investigation Report ("RIR"), a Groundwater Exposure Pathway Elimination Analysis, a Conceptual Cleanup Proposal and a Cleanup Plan. The Department has reviewed and has approved each of these documents. The RIWP is attached hereto as Exhibit B; the RIR as Exhibit C; the Groundwater Exposure Pathway Elimination Analysis as Exhibit D; the Conceptual Cleanup Proposal as Exhibit E; and the Cleanup Plan as Exhibit F.

DD. The Department's settlement with Cyprus is in the public interest and is authorized by Sections 505(g) and 505(h) of HSCA, 35 P.S. §§ 6020.505(g) and 6020.505(h). Pursuant to Section 502(c) of HSCA, 35 P.S. § 6020.502(c), the Department has not published this Site for listing in the *Pennsylvania Bulletin* because Cyprus and the Department intend to voluntarily enter into the third consent order and agreement, referenced above in Paragraph BB, to abate the release or threatened release of hazardous substances at the Site.

ORDER

NOW THEREFORE, after full and complete negotiation of all matters set forth in this CO&A, and upon mutual exchange of the covenants contained herein, the Parties intending to be legally bound, it is hereby ORDERED by the Department, and AGREED to by Cyprus and the Department, as follows:

1. This CO&A is authorized and is being executed pursuant to Sections 505(g) and 505(h) of HSCA, 35 P.S. §§ 6020.505(g) and 6020.505(h), and Section 107 of CERCLA, 42 U.S.C. § 9607. Except as provided herein, the failure of Cyprus to comply with any term or condition of this CO&A shall subject Cyprus to all penalties and remedies provided by HSCA and any other applicable law.

PRE-DESIGN INVESTIGATION WORK PLAN AND CLEANUP PLAN DETAILED DESIGNS

2. The Parties shall finalize and Cyprus shall implement the Pre-Design Investigation Work Plan and the Cleanup Plan Detailed Designs in the manner outlined in this paragraph. Any sustained dispute over the modification of any of the submissions made by Cyprus pursuant to this paragraph shall be addressed under the dispute resolution process described in Paragraph 32.

- a. Within fifteen (15) days of the effective date of this CO&A, as described in Paragraph 36 ("Effective Date"), Cyprus shall submit to the Department, for review and approval, a Pre-Design Investigation Work Plan, along with a detailed cost estimate and a schedule of implementation.
- b. Within thirty (30) days of receipt of the Department's written approval of the Pre-Design Investigation Work Plan or thirty (30) days after the Effective Date, whichever date is later, Cyprus shall implement the Pre-Design Investigation Work Plan, consistent with the approved schedule. Any substantial field changes made during implementation of the Pre-Design Investigation Work Plan shall be first reviewed and approved by the Department.

- c. Within sixty (60) days after completion of the Pre-Design Investigation Work Plan, Cyprus shall submit to the Department, for review and approval, a Pre-Design Investigation Report.
- d. Within one hundred and twenty (120) days after the Department's approval of the Pre-Design Investigation Report, Cyprus shall submit Detailed Designs for implementation of the Cleanup Plan. A detailed cost estimate and a schedule of implementation shall be included in the Cleanup Plan Detailed Designs, as to both the Site's remediation and its post-remediation care.
- e. Within thirty (30) days of the Department's issuance to Cyprus of its written approval of the Cleanup Plan Detailed Designs, Cyprus and the Department agree to execute a third consent order and agreement with terms similar to this CO&A regarding implementation of the Cleanup Plan Detailed Designs and all necessary post-remediation care. The third consent order and agreement will be published by the Department for public review and comment.
- f. This section shall be construed to require all response activities to be necessary and consistent with the National Contingency Plan, 40 C.F.R. Part 300.

SITE ACCESS

- 3. Within thirty (30) days of the Effective Date, and prior to its implementation of the Cleanup Plan, Cyprus shall provide the Department with either:
 - (a) A copy of an agreement executed by the Site owners for access to the Site by Cyprus, the Department, their contractors and whatever other party might be necessary for Cyprus to fulfill its obligations under Paragraph 2 and for the Department to monitor Cyprus' progress in doing so, including a requirement for continued access as part of any transfer to a future owner of the Site or any portion thereof. The access agreement shall provide that the Department, its employees, contractor and agents shall have access at all times to the Site for any purpose authorized under HSCA, including: (a) implementing a response; (b) monitoring the progress of activities taking place; (c) verifying any data or information submitted to the Department; (d) conducting investigations relating to contamination at or near the Site; (e) obtaining samples at the Site; and (f)

inspecting and copying records, operating logs, contracts or other documents required to assess Cyprus' compliance with this CO&A.

- (b) A report of Cyprus' efforts to obtain an access agreement by the Site owners as described in (i) above, including a summary of communications with the Site owners and issues that hindered an agreement, if known. If Cyprus is unable with reasonable effort to obtain the Site access agreement, the Department shall secure necessary Site access by order or other appropriate action. If any scheduled activities are delayed because of lack of Site access, the schedule shall be extended appropriately until Site access is obtained.

CYPRUS' SUBMISSION OF WORK REPORTS AND CHANGE ORDERS

4. During field work pursuant to the Pre-Design Investigation Work Plan and implementation of the Cleanup Plan Detailed Designs, Cyprus shall email the Department, consistent with Paragraph 42, copies of Cyprus' contractor's internal daily reports. Cyprus shall do so on, at minimum, a weekly basis. In addition, by the tenth calendar day of each month during field activities, Cyprus shall email the Department, consistent with Paragraph 42, a report summarizing the work performed according to the Pre-Design Investigation Work Plan during the previous month and describing the work scheduled to be performed in the upcoming month, along with the projected impact on the budget.

5. The Department shall have ten (10) days to review and comment on any Change Orders submitted by the contractor before they are approved by Cyprus. Cyprus shall email any Change Orders to the Department consistent with Paragraph 42.

CYPRUS' FUNDING CONTRIBUTION

6. In carrying out the response actions described in Paragraph 2 (a) through (d), Cyprus shall fund 100% of the costs associated with two parcels of the Site. Those two parcels total approximately 38 acres and are owned by Langeloth Metallurgical Company, L.L.C. They shall be known as the "Western Area." They are identified on the map of the Site attached as Exhibit A, as follows:

(a) a portion of Tax Parcel 570-023-00-00-0001-00 (35.3 acres);

(b) a portion of Tax Parcel 570-023-00-00-0001-00 (3.0 acres);

7. In carrying out the response actions described in Paragraph 2 (a) through (d), Cyprus shall fund 60% of the cleanup and post-remediation care costs associated with the approximately 119 acres making up the balance of the Site, including a portion of one parcel and a second parcel owned by Bologna Coal Company and totaling approximately 89; four parcels owned by Peterson Industries, Inc. and totaling approximately 26 acres; and three parcels owned by Smith Township totaling approximately 4 acres. The Department shall pay 40% of the costs associated with these parcels (or portion thereof). These parcels shall be known as the "Eastern Area." These parcels are identified on the map attached as Exhibit A, as follows:

(a) a portion of Tax Parcel 570-023-00-00-0005-00, owned by Bologna Coal Company, (approximately 88 acres, which is the result of 105.07 acres less approximately 17 acres);

(b) Tax Parcel 570-023-00-00-0004-04, owned by Bologna Coal Company, (1.03 acres);

(c) a portion of Tax Parcel 570-023-00-00-0004-00, owned by Peterson Industries, Inc. (approximately 26 acres, which is the result of 33.43 acres less approximately 7 acres);

- (d) Tax Parcel 570-023-00-00-0004-07, owned by Smith Township, (1.27 acres);
- (e) Tax Parcel 570-023-00-00-0005-05, owned by Smith Township, (1.37 acres);
- (f) Tax Parcel 570-023-00-00-0005-06, owned by Smith Township, (0.97 acres);

COMMONWEALTH'S FUNDING CONTRIBUTION

8. The Commonwealth shall fund 40% of the costs for development of the Pre-Design Investigation Workplan, implementation of the Pre-Design Investigation, and preparation of the Cleanup Plan Detailed Designs associated with the Eastern Area, by reimbursing Cyprus for its payment of individual invoices. The Commonwealth shall pay these reimbursement costs from the Pennsylvania Hazardous Sites Cleanup Fund.

9. As of the execution of this CO&A, as to costs for development of the Pre-Design Investigation Workplan, implementation of the Pre-Design Investigation and preparation of the Cleanup Plan Detailed Designs associated with the Eastern Area, Cyprus projects the total costs to be approximately \$1,553,713.00, with the Commonwealth's 40% share projected to be approximately \$621,485.20.

10. If Cyprus expects to exceed its cost estimates during any phase of work, Cyprus shall email the Department promptly, consistent with Paragraph 42. As necessary, this CO&A shall be amended to address any revision of estimated costs and any resulting revision to the Department's funding obligations.

11. The Commonwealth shall reimburse 40% of payment only for an invoice that has been reviewed, approved and acted upon as follows:

- (a) Cyprus shall submit the invoice to the Department's Project Officer;

- (b) the Department's Project Officer shall review and, if appropriate, approve the invoice;
- (c) upon its approval, the Department's Project Officer shall submit the invoice to the Comptroller for review; and
- (d) if the Comptroller approves the invoice, the Comptroller shall process the invoice for payment to Cyprus from the Pennsylvania Hazardous Sites Cleanup Fund.

12. To facilitate payment, Cyprus shall submit invoices to the Department on a monthly basis. Within ten (10) business days of the Department's receipt of a month's group of invoice(s) from Cyprus, the Department's Project Officer shall review the invoices and shall e-mail Cyprus to advise, as to each invoice, either that (a) the invoice has been approved and forwarded to the Comptroller for review; or (b) the invoice has been disapproved, along with the reasons therefor. Within fifteen(15) business days of the Department's receipt of a month's group of invoice(s) from Cyprus, the Department's Project Officer will forward all approved invoices from that group to the Comptroller for review. The Comptroller shall review the group of approved invoices. As to an invoice approved by the Comptroller and for which payment is made, Cyprus shall e-mail the Department's Project Officer to confirm receipt of payment. If the Comptroller does not approve an invoice, the Department shall promptly notify Cyprus and state the reasons therefor. Should a dispute arise as the result of the Department's or Comptroller's approval or disapproval of an invoice or the failure of either to act timely, the Parties shall engage in the dispute resolution process described in Paragraph 32. Irrespective of the time frame in which Cyprus chooses to submit its invoices to the Department, the Department and Cyprus shall meet at least monthly to review an accounting of all expended costs related to Cyprus' Site work relevant to Department payment.

13. As of the Parties' execution of this CO&A, the Department foresees no

Commonwealth budgetary constraints that would unreasonably delay payment on a Department-approved invoice, as described in Paragraphs 9 through 12.

COMPLIANCE WITH INFORMATION REQUEST

14. Cyprus certifies that it has made a reasonably diligent effort to respond to the May 13, 1999 information request issued by the Department to Cyprus in regard to the Site, pursuant to Section 503 of HSCA, 35 P.S. § 6020.503. Cyprus certifies, to the best of its knowledge and belief, that it has provided the Department with all of the information requested by the Department and in the possession of Cyprus or any of its officers, directors, employees, contractors and agents which relates to the generation, treatment, transportation or disposal of hazardous substances at the Site.

STIPULATED PENALTIES

15. In the event Cyprus fails to comply in a timely manner with any term or provision of this CO&A, Cyprus shall be in violation of this CO&A and, in addition to other applicable remedies, shall at the Department's request pay to the Department a stipulated penalty of TWO HUNDRED DOLLARS (\$200.00) per day for each violation it has failed to fulfill. The penalty shall be due upon written notice from the Department. Such penalty payments shall be payable monthly on or before the fifteenth day of each succeeding month, shall reference the Site, and shall be made by corporate check or the like made payable to the "Commonwealth of Pennsylvania, Hazardous Sites Cleanup Fund." The payments shall be sent to the Department consistent with Paragraph 42.

16. It is understood by Cyprus that payment of any penalty under Paragraph 15 shall neither constitute a waiver of Cyprus' duty to meet its obligations under this CO&A nor preclude the Department from commencing an action to compel Cyprus' compliance with the terms and conditions of this CO&A, or any applicable statute, rule, regulation, permit or order of the Department. The payment resolves only Cyprus' liability for civil penalties arising from the violation of this CO&A for which the payment is made.

17. Stipulated penalties paid pursuant to this CO&A shall be in lieu of any other penalty or monetary sanction available to the Department, including but not limited to civil penalties pursuant to Section 1104 of HSCA, 35 P.S. § 6020.1104, provided, however, that the Department may decline to accept stipulated penalties and seek civil penalties instead.

18. If the Department brings an action against Cyprus to collect any stipulated penalty due under this CO&A, Cyprus shall reimburse the Department for all reasonable costs and expenses of such action, including but not limited to Department personnel costs and attorney's fees.

COVENANT NOT TO SUE BY THE DEPARTMENT

19.a. Upon the Effective Date, subject to the reservation of rights provided in Paragraphs 20 through 23, including the reopener provisions described in Paragraph 21, and only so long as Cyprus is in full compliance with this CO&A, the Department covenants not to sue or to take administrative action against Cyprus pursuant to CERCLA, HSCA, Clean Streams Law, SWMA, or any other state or federal statutory or common law, for the response actions described in Paragraph 2(a) through (d), or for response costs related thereto.

b. The Department intends for the Site to qualify as an "eligible response site" in accordance with CERCLA § 128(b)(1), 42 U.S.C. § 9628(b)(1), and the April 21, 2004 Memorandum of Agreement between the Department and the United States Environmental Protection Agency regarding implementation of the "One Cleanup Program" and, so long as Cyprus is in full compliance with this CO&A, the Department agrees that CERCLA § 128(b)(1) and the Memorandum of Agreement prevent the United States from taking administrative or judicial enforcement action against Cyprus under CERCLA § 106, 42 U.S.C. § 9606, or judicial enforcement action to recover response costs under CERCLA § 107, 42 U.S.C. § 9607, with respect to the response actions described in Paragraph 2(a) through (d), or for response costs related thereto.

RESERVATION OF RIGHTS

20. The information received by and presently known to the Department includes only that information contained in the reports from those investigations described in Paragraphs M through P, in the Department's March 10, 2004 Response Justification Document, and in the responses to the information requests sent by the Department pursuant to Section 503 of HSCA, 35 P.S. § 6020.503, as of the date of the Parties' execution of the CO&A.

21. Notwithstanding any other provision of this CO&A, the covenant not to sue by the Department set forth in Paragraph 19 shall be null and void in the case of application of any of the reopeners listed in Section 505 of Act 2, 35 P.S. § 6026.505, or in the case of a reopening of this matter in the event that:

a. information is received concerning the volume or type of hazardous substances contributed to the Site by Cyprus or any of its officers, directors, employees, contractors or agents, and that information was previously unknown to the Department and indicates that Cyprus or any of its officers, directors, employees, contractors or agents, contributed to the Site an amount or type of hazardous substances in material excess of that amount or toxicity reasonably understood by the Department to have been contributed to the Site based on the information known to the Department, as described in Paragraph 20; or

b. Cyprus or its officers, directors, employees, contractors or agents are found to have falsified information, reports, or data, or to have made a false representation or statement in a record, report or document relating to the release or threatened release of hazardous substances at the Site.

22. Notwithstanding any other provision of this CO&A, the covenant not to sue by the Department set forth in Paragraph 19 shall not apply to claims by the Department against Cyprus based on:

- a. failure to meet the requirements of this CO&A, in a proceeding to enforce the terms hereof;
- b. past, present, or future disposal of hazardous substances outside the boundaries of the Site;
- c. past, present or future violations of federal or state criminal law; or
- d. damages, if any, for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessment.

23. With regard to all matters not addressed in this CO&A, either directly or in the RIR, the Department specifically reserves all rights to institute equitable, administrative, civil, and criminal actions against Cyprus for:

- a. any past, present, or future violations of any statute, regulation, permit or order; or
- b. any pollution or potential pollution to the air, land or waters of the Commonwealth of Pennsylvania.

EFFECT ON THIRD PARTIES

24. Nothing in this CO&A shall constitute or be construed as a release or covenant not to sue regarding any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or equity, which the Department or Cyprus may have against any person who is not a party to this CO&A. The Department and Cyprus expressly reserve the right to sue or continue to sue any person who is not a party to this CO&A.

EXISTING OBLIGATIONS UNAFFECTED

25. Nothing set forth in this CO&A is intended, nor shall it be construed, to relieve or limit Cyprus' obligation to comply with any existing or subsequent statute, regulation, permit or order. In addition, nothing set forth in this CO&A is intended, nor shall it be construed, to authorize any violations of any statute, regulation, permit or order issued or administered by the Department.

ACKNOWLEDGMENT OF NO OBLIGATION

26. Cyprus acknowledges that the Department has no obligation to defend it in any suit, demand or claim for contribution for any matters arising from the release or threatened release of hazardous substances at the Site, arising out of response actions conducted by or authorized by the Department at the Site, or arising out of this CO&A.

REMEDIES FOR BREACH

27. In the event of any material breach of this CO&A, the Department may, in addition to any remedies prescribed herein, institute against Cyprus any equitable, administrative, or civil action, including an action to enforce this CO&A. These remedies are cumulative, and the exercise of one does not preclude the exercise of any other. The failure of the Department to pursue any remedy shall not be deemed to be a waiver of that remedy. Cyprus' remedies for a breach by the Department shall be as specified in Paragraphs 32 and 33 and as may otherwise be provided by law. The failure of Cyprus to pursue any remedy shall not be deemed to be a waiver of that remedy.

COVENANT NOT TO SUE BY CYPRUS

28. Except as allowed herein, Cyprus covenants not to sue and shall not assert any claims, demands or causes of action, in law or in equity, against the Commonwealth government, as that term is defined in 42 Pa. C.S.A. § 102, arising from the release or threatened release of hazardous substances at the Site, arising out of any response actions conducted by or authorized by the Department at or related to the site, or arising out of this CO&A. This covenant not to sue

extends only to the Commonwealth government with regard to those matters addressed in this CO&A and does not extend to any other person.

WAIVER OF OTHER CLAIMS BY CYPRUS

29. Except as allowed herein, Cyprus shall not assert any claims for reimbursement, contribution and/or indemnity from the Pennsylvania Hazardous Sites Cleanup Fund for matters arising from the release or threatened release of hazardous substances at the Site, arising out of any response actions conducted by or authorized by the Department at or related to the Site, or arising out of this CO&A. Cyprus waives any claims or defenses it may have regarding the application of Sections 708, 709 or 1301 of HSCA, 35 P.S. §§ 6020.708, 6020.709 or 6020.1301, with respect to the enforcement of this CO&A.

CONTRIBUTION PROTECTION

30. Subject to the reservation of rights provided in Paragraphs 20 through 23, including the reopener provisions provided in Paragraph 21, and only so long as Cyprus is in full compliance with this CO&A, upon the Effective Date, Cyprus shall have resolved its liability to the Department for the response actions described in Paragraph 2(a) through (d), or for response costs related thereto. At that time, provided that Cyprus remains in compliance with the requirements of this CO&A, to the extent that protection is provided by Section 705(c)(2) of HSCA, 35 P.S. § 6020.705(c)(2), Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and other relevant laws. Cyprus shall be protected from contribution regarding the response actions described in Paragraph 2(a) through (d), or for response costs related thereto.

AGREEMENT AS TO FINDINGS

31. The Findings contained in Paragraphs A through DD are to be used solely by the Department and solely for the enforcement of this CO&A in the event of an alleged breach thereof by Cyprus. The findings are not to be used by any other person or for any other purpose. In any such enforcement proceeding, Cyprus shall not challenge the accuracy or validity of the

Findings, but reserves the right to contest the accuracy or validity of the Findings in any other proceeding.

DISPUTE RESOLUTION

32. All disputes arising from or associated with this CO&A, excepting those relating to the Commonwealth's payment obligation, shall be resolved according to the following procedure:

a. To initiate dispute resolution, Cyprus shall provide written notice to the Department within five (5) days of a dispute concerning the obligations imposed upon Cyprus under this CO&A. Cyprus shall have an additional five (5) days to provide the Department with a written list of objections to the Department's action ("Statement of Position").

b. The Department shall have seven (7) days following receipt of Cyprus' Statement of Position to provide its response ("Response"), in writing, to Cyprus.

c. Within the seven-day period following receipt of the Department's Response by Cyprus, the Department's Regional Director or, in the event the Regional Director is unavailable, the Assistant Regional Director, shall meet and confer with Cyprus' designated representatives in an attempt to resolve the dispute. In the event the Parties are unable to resolve the dispute in this fashion and within this seven-day period, the Parties shall jointly set out in writing within the seven-day period their unresolved differences, identifying the issues which remain in dispute and any work that Cyprus can reasonably undertake that is unaffected by the issues that are in dispute ("Joint Dispute Statement").

d. Following the Parties' drafting of the Joint Dispute Statement, the Department shall issue a written decision ("Written Decision") setting forth its final position on the issues in dispute. The Department's Written Decision shall constitute an appealable action for purposes of review by the Pennsylvania Environmental Hearing Board ("EHB"). Should it

appeal, Cyprus shall have the burden of proof to show by a preponderance of the evidence that the Department's Written Decision was arbitrary and capricious.

e. Should Cyprus appeal the Department's Written Decision to the EHB, stipulated penalties shall accrue per day per violation, consistent with Paragraphs 15 through 18, beginning the fifth (5th) day following the Department's issuance of the Written Decision and continuing through the date Cyprus initiates compliance with the obligation in dispute, except that Cyprus shall owe no stipulated penalties pursuant to this subparagraph and shall be refunded all stipulated penalties paid pursuant to this subparagraph in the event the EHB (i) decides the appeal in Cyprus' favor or (ii) determines that the appeal was not taken in bad faith and without merit.

f. During the pendency of an appeal by Cyprus before the EHB of the Department's Written Decision, and until the later of such time as either Cyprus withdraws its appeal or the Parties reach agreement either through settlement negotiations or by means of an EHB opinion or adjudication, except as set forth in the Joint Dispute Statement, Cyprus shall not be obligated to perform any work set forth in the document or report that is being contested, nor shall Cyprus be obligated to pay any costs being demanded, except whatever accrued stipulated penalties that may become due and owing as described in subparagraph (e). Notwithstanding, Cyprus shall proceed to perform any obligations under this CO&A not contested in its Statement of Position or, subsequently, the Joint Dispute Statement. In any appeal, Cyprus shall not contest the Findings contained in Paragraphs A through DD or Cyprus' obligations under this CO&A not the subject of dispute resolution.

g. In an appeal before the EHB, the Parties shall have thirty (30) days to conduct expedited discovery. The period of discovery shall commence seven (7) days after Cyprus' Notice of Appeal is received by the Southwest Region, Office of Chief Counsel. Cyprus shall file its Pre-Hearing Memorandum within fifteen (15) days after the close of discovery. The Department shall file its Pre-Hearing Memorandum within fifteen (15) days of receipt of Cyprus' Pre-Hearing Memorandum. Nothing contained herein shall preclude the Parties from extending

the foregoing schedule by mutual agreement.

h. Within seven (7) days of a final resolution of the appeal, either through an EHB opinion or adjudication or through settlement negotiations that may occur during the pendency of the appeal before the EHB, Cyprus shall perform its obligations under this CO&A consistent with the EHB opinion or adjudication or any settlement agreement reached between the Parties.

i. All decisions of the EHB regarding disputes submitted hereunder shall be final, and the Parties expressly waive any right of appeal, statutory or otherwise.

33. All disputes relating to the Commonwealth's payment obligation shall be resolved according to the following procedure:

a. To initiate dispute resolution, Cyprus shall provide written notice to the Department within five (5) days of receiving notice from the Department of a disapproval of an invoice under Paragraph 12, or within five (5) days of the Department's or Comptroller's failure to act on an invoice within the time frames described in Paragraph 12. Cyprus shall have an additional five (5) days to provide the Department with a written list of objections to the Department's action or inaction ("Statement of Position").

b. The Department shall have twenty (20) days following receipt of Cyprus' Statement of Position to provide its response ("Response"), in writing, to Cyprus.

c. Within the twenty-day period following receipt of the Department's Response by Cyprus, the Department's Regional Director or, in the event the Regional Director is unavailable, the Assistant Regional Director shall meet and confer with Cyprus' designated representatives in an attempt to resolve the dispute. In the event the Parties are unable to resolve the dispute in this fashion and within this twenty-day period, the Parties shall jointly set out in

writing within the twenty-day period their unresolved differences, identifying the issues which remain in dispute and any work that Cyprus can reasonably undertake that is unaffected by the issues that are in dispute (“Joint Dispute Statement”). The Joint Dispute Statement shall be deemed submitted as of the date signed by the Parties.

d. The Department shall issue a written decision (“Written Decision”) setting forth its final position on the issues in dispute within thirty (30) days of the submission of the Joint Dispute Statement. If the Department fails to issue a Written Decision within thirty (30) days, the claim shall be deemed denied as of the thirtieth (30th) day (“Deemed Denial”).

e. Upon receipt of the Written Decision or upon a Deemed Denial, Cyprus may present a claim to the Board of Claims, which the Parties agree to utilize to arbitrate disputes regarding the Commonwealth’s payment obligations in accordance with applicable law, including but not limited to 62 Pa. C. S. § 1724(a).

f. Any claim presented to the Board of Claims shall be filed within one (1) month of the date it accrued, and the date of accrual shall be the earlier of the date of the Written Decision or the Deemed Denial.

FORCE MAJEURE

34.a. In the event Cyprus is prevented from complying in a timely manner with any time limit imposed in this CO&A solely because of a strike, fire, flood, act of God, or other circumstances beyond Cyprus’ reasonable control and which Cyprus, by the exercise of all reasonable diligence, is unable to prevent or mitigate, or for any other reason recognized as a *force majeure* event in this CO&A, Cyprus may petition the Department for an extension of time. An increase in the cost of performing the obligations set forth in this CO&A shall not constitute circumstances beyond Cyprus’ control. Cyprus expressly agrees that its economic inability to comply with any of the obligations of this CO&A shall not be the sole grounds for any extension of time under this paragraph. A delay by the Commonwealth to make the payments required by

this CO&A as provided in Paragraph 11 shall constitute a *force majeure* event, regardless of the economic ability of Cyprus to continue the remedial investigation, cleanup or post-remediation care of the Site.

b. Cyprus shall only be entitled to the benefits of this paragraph if it notifies the Department within three (3) business days by telephone and within ten (10) calendar days in writing ("Written Statement") of the date it becomes aware or reasonably should have become aware of the circumstances impeding performance. The Written Statement shall include all related documentation, as well as a written statement made subject to penalty for falsification by Cyprus' Project Manager specifying the reasons for the delay, the expected duration of the delay, and the efforts which have been made and are being made by Cyprus to minimize the length of the delay. Cyprus' failure to comply with the requirements of this paragraph specifically and in a timely fashion shall render this paragraph null and of no effect as to the particular incident involved.

c. Within five (5) calendar days after receipt of Cyprus' Written Statement, the Department shall decide whether to grant all or part of the extension requested on the basis of all documentation submitted by Cyprus and other information available to the Department. Only a letter which has been signed by the Department and its counsel shall constitute an extension under this paragraph.

d. In the event Cyprus is dissatisfied with the Department's decision as to Cyprus' request for extension, Cyprus may submit the contested decision to the dispute resolution process described in Paragraph 32.

OPPORTUNITY FOR PUBLIC COMMENT

35. Pursuant to Section 1113 of HSCA, 35 P.S. § 6020.1113, the Department shall publish a notice of settlement in the *Pennsylvania Bulletin* and in the *City of Washington Observer-Reporter* containing a summary of the terms of this CO&A. This notice of settlement

shall also be sent to all parties known by the Department to be responsible persons at the site, as defined by Section 103 of HSCA, 35 P.S. § 6020.103. The notice of settlement shall indicate that the Department shall receive and consider comments relating to this CO&A for sixty (60) days beginning on the date of publication of the notice. The Department reserves the right to withdraw its consent to this CO&A if the comments concerning this CO&A disclose facts or considerations which indicate that this CO&A is impracticable or not in the public interest.

EFFECTIVE DATE

36. This CO&A shall be effective upon the date Cyprus receives written communication from the Department that this CO&A is final and effective in its present form. The Department shall send such written communication once it has filed a response to any significant written comments received pursuant to the settlement notice described in Paragraph 35 and no timely appeal has been taken from that response, or once the Department has confirmed that no significant written comments have been received. In the event that the Department notifies Cyprus that it is withdrawing its consent to this CO&A in light of public comments, the terms of this CO&A shall be void, shall have no force or effect and may not be used as evidence in any litigation or any other proceeding.

ATTORNEY'S FEES

37. The Parties agree to bear their respective attorney's fees, expenses and other costs in the prosecution or defense of this matter, or any related matters, arising prior to execution of this CO&A.

ENTIRE AGREEMENT

38. This CO&A shall constitute the entire integrated agreement of the Parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or intent of any provision herein in any litigation or any other proceeding.

MODIFICATION

39. No changes, additions, modification, or amendments of this CO&A shall be effective unless they are set out in writing and signed by the Parties hereto.

TITLES AND DEFINITIONS

40. A title used at the beginning of any section of this CO&A is provided solely for the purpose of identification and shall not be used to interpret this CO&A. Unless otherwise expressly defined herein, terms used in this CO&A shall have the meaning assigned to them in HSCA.

SEVERABILITY

41. The paragraphs of this CO&A shall be severable, and should any part hereof be declared invalid or unenforceable by a tribunal having jurisdiction, the remainder shall continue in full force and effect between the Parties, provided, however, that, if the funding provision of Paragraph 8 is declared invalid or unenforceable, this CO&A shall terminate as of the date such declaration becomes final and unappealable.

CORRESPONDENCE

42. All correspondence with and submittals to the Department related to this CO&A shall reference the Site and shall be addressed to:

Terry Goodwald
Project Manager
Environmental Cleanup Program
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Phone: 412-442-4133
Fax: 412-442-4194
E-Mail: tgoodwald@pa.gov

A copy of all correspondence with the Department concerning this CO&A shall reference the Site and shall be addressed to:

Edward S. Stokan, Esquire
Assistant Counsel
Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Phone: 412-442-4262
Fax: 412-442-4267
E-mail: estokan@pa.gov

43. All correspondence with and submittals to Cyprus related to this CO&A shall reference the Site and shall be addressed to:

Ronald J. Buchanan, Jr.
Manager, Remediation Projects
c/o Cyprus Amax Minerals Co.
333 North Central Avenue
Phoenix, AZ 85004

Phone: 602-366-8301
Fax: 602-366-7313
E-mail: Ronald_Buchanan@fmi.com

A copy of all correspondence with Cyprus concerning this CO&A shall reference the Site and shall be addressed to:

David L. Wallis, Esquire
Gallagher & Kennedy
2575 East Camelback Road
Phoenix, AZ 85016-9225

Phone: 602-530-8000
Fax: 602-530-8500
E-mail: dlw@gknet.com

In addition, Cyprus agrees that the service of any notice or any legal process for any purpose under this CO&A, including its enforcement, may be made by mailing a copy by certified mail, return receipt requested, or by any overnight delivery service with standard tracking, to its

attorney, whose name and address are contained in this paragraph.

EXECUTION IN COUNTERPARTS

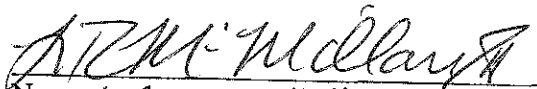
44. This CO&A may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

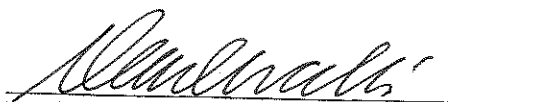
IN WITNESS WHEREOF, the Parties hereto have caused this CO&A to be executed by their duly authorized representatives. The undersigned representative of Cyprus certifies, under penalty of law, as provided by 18 Pa. C.S. § 4904, that he/she is fully authorized to execute this CO&A on behalf of Cyprus, that Cyprus consents to the entry of this CO&A as an ORDER of the Department; and that Cyprus hereby knowingly waives its right to appeal this CO&A, which right may be available under Section 4 of the Environmental Hearing Board Act, Act of July 13, 1988, P.L. 530, No. 1988-94, 35 P.S. § 7514, the Administrative Agency Law, 2 Pa. C.S. § 103(a) and Chapters 5A and 7A, Sections 508 and 1102 of HSCA, 35 P.S. §§ 6020.508, and 6020.1102, or any other provision of law. The undersigned officers and employees of the Commonwealth certify that they have authority to sign this CO&A.

**FOR CYPRUS AMAX MINERALS
COMPANY:**


PA Vendor ID # 759194


Federal Taxpayer ID # 86-0971216


Name L. RICHARDS McMILLAN
Title: SENIOR VICE PRESIDENT


David L. Wallis, Esquire
Attorney for Cyprus Amax Minerals Company


**FOR THE COMMONWEALTH OF
PENNSYLVANIA, DEPARTMENT
OF ENVIRONMENTAL PROTECTION:**


Dana K. Aunkst
Executive Deputy Secretary for Programs
PA Department of Environmental Protection


Edward S. Stokan, Esquire
Assistant Counsel

I hereby approve this agreement and certify that funds in the amount of \$621,485.20 are available under Appropriation:

SAP Fund	Budget Period	G/L	Cost Center	Internal	Amount
2007000000	2015	6343117	3544550000	3545545578	\$467,897.60
2007000000	2016	6343117	3544550000	3545545578	\$102,437.60
2007000000	2017	6343117	3544550000	3545545578	\$51,150.00


Comptroller Robert J. Crouse

6/16/15
Date

SAP# 4000019494