

BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

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Cyprus Amax Minerals Company
333 North Central Avenue
Phoenix, AZ 85004

**Director's Final
Findings and Orders**

Respondent.

PREAMBLE

It is hereby agreed to by the Parties as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to Cyprus Amax Minerals Company ("Respondent"), pursuant to the authority vested in the Director of Ohio EPA under Ohio Revised Code ("ORC") §§ 3734.02(G), 3734.13 and 3745.01 and Ohio Administrative Code ("OAC") Rule 3745-55-10(C).

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and its successors in interest liable under Ohio law. No change in ownership of the Respondent or of the Facility shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapters 3714 and 3734 and the rules promulgated thereunder.

IV. FINDINGS

All of the findings necessary for the issuance of these Orders pursuant to ORC §§ 3734.02(G), 3734.13 and 3745.01 have been made and are outlined below. Nothing in the findings shall be considered to be an admission by Respondent of any issue of law or fact. The Director of Ohio EPA has made the following findings:

1. Pursuant to ORC § 3734.02(G) and OAC rule 3745-27-03(B)), the Director, by order, may exempt any person generating, collecting, storing, treating, or disposing of solid wastes in such quantities or under such circumstances that, in the determination of the Director, are unlikely to adversely affect the public health or safety or the environment, from any

requirement to obtain a permit or comply with other requirements of ORC Chapter 3734. Any such exemption shall be consistent with and equivalent to rules promulgated under the Resource Conservation and Recovery Act of 1976, 90 Stat. 2806, 42 U.S.C. § 6921 et seq., as amended ("RCRA"). Furthermore, OAC rule 3745-55-10(C) allows the director to replace all or part of the requirements of OAC rules 3745-55-10 to 3745-55-20 with alternate requirements set out in an enforceable document where the director determines that (a) a regulated unit is situated among other waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more waste management units (or areas of concern) are likely to have contributed to the release, and (b) it is not necessary to apply the closure requirements of rules 3745-55-10 to 3745-55-20 because the alternative requirements are protective of human health and the environment.

2. Respondent is a "person," as defined in ORC §§ 3714.01 and 3734.01(G) and OAC rules 3745-27-01(P)(3), 3745-50-10(P)(6), and 3745-400-01(P)(4).
3. Respondent owns the property located at County Road 74, Cross Creek Township, Jefferson County, Ohio. These Orders shall apply to the above-referenced property owned by Respondent, as well as the contiguous geographic area constituting the "Site" as defined in the Consent Order for Preliminary Injunction referenced in Finding 12 below, which properties shall be collectively referred to in these Orders as the "Facility.")
4. The Facility consists of approximately 333.5 acres, which includes a former ferro-alloy plant that was formerly owned and operated by Vanadium Corporation of America, and Satralloy, Inc., among others. Additionally, the estate of Catherine Glorious owned this property after all ferro-alloy production operations ceased at the Facility.
5. The ferro-alloy plant was constructed on undeveloped land in 1958 by Vanadium Corporation of America. The ferro-alloy plant consisted of two production (mill) buildings and associated offices, water and waste water treatment facilities, and other miscellaneous buildings. The alloys produced in the plant were made from ores by smelting and refining in electric-arc furnaces. Six (6) electric-arc furnaces were housed in the mill buildings. Molten metals were cast into various shapes and shipped to customers. Based on available information, the electric-arc furnaces at the plant were shut down in approximately 1982.
6. Secondary materials from the production process were moved from the mill buildings to several areas on the Facility. Secondary materials generated at the Facility included: baghouse dust; high-carbon chrome slag; low-carbon chrome slag; sludge generated from the water concentration (reclamation) process; other unidentified materials with high concentrations of metals; and miscellaneous solid waste. These secondary materials contained chromium, cadmium, barium, lead and/or mercury. These secondary materials remain at the Facility. Respondent contends that these materials were exempt from regulation under RCRA pursuant to the Bevill

amendment, which amendment was enacted in late 1980.

7. In July 1988, during a time when Respondent did not own or operate the Facility, Ohio EPA conducted a preliminary assessment at the Facility, and identified secondary materials with the potential for heavy metal contamination of surface water and ground water, and open dumping of solid waste.
8. In approximately 1989, the Bevill amendment was narrowed such that many of the types of secondary materials at the Facility would be subject to regulation under RCRA if actively managed. In May 1997, during a time when Jefferson Processing operated the Facility, Ohio EPA conducted a compliance evaluation inspection at the Facility, including sampling of certain secondary materials. It is Ohio EPA's position that certain secondary materials were actively managed. Ohio EPA initially determined that some of the secondary materials which were actively managed at the Facility were believed to exhibit a characteristic of a hazardous waste. Based upon this sampling, Ohio EPA preliminarily concluded that these secondary materials may have exhibited a characteristic of a hazardous waste and also that such secondary materials were actively managed. Therefore, Ohio EPA determined that Jefferson Processing had created a hazardous waste management unit(s) at the Facility. The Ohio EPA determined further that these hazardous waste management units were situated among other waste management units that were likely to have contributed to a release at the Facility.
9. In 1997, Ohio EPA informed Jefferson Processing, the operator of the Facility at the time, of its findings from the inspections referenced in Finding No. 9. of these Orders.
10. Jefferson Processing was generally unresponsive to Ohio EPA.
11. Respondent, Cyprus Amax Minerals Company, purchased the Facility on May 12, 2010.
12. On November 3, 2010, Respondent entered into a Consent Order for Preliminary Injunction ("COPI") with the State of Ohio to conduct a remedial investigation and feasibility study in order to generally address any immediate human health and environmental threats at the Facility as well as collect information for a final remedy for the Facility. The COPI also included the requirement to submit an Interim Action Work Plan ("IA Work Plan") and a Remedial Investigation and Feasibility Study Work Plan ("RI/FS Work Plan") to Ohio EPA for approval.
13. On December 20, 2010, Respondent submitted the initial IA Work Plan and RI/FS Work Plan to Ohio EPA. Within the IA Work Plan and RI/FS Work Plan, Respondent described activities that would take place at the Facility. Some of those activities included moving, consolidating, and staging solid waste, construction and demolition debris, and both Bevill-exempt materials located at the Facility and certain secondary materials which Ohio EPA believed to exhibit a characteristic of a hazardous waste, including some secondary materials that

were actively managed by Jefferson Processing. By letter dated April 5, 2013, the RI/FS Work Plan was approved by the Ohio EPA. By letter dated April 25, 2013, the IA Work Plan was approved by Ohio EPA. The April 25, 2013 approval included certain conditions.

14. The version of the IA Work Plan dated November 12, 2012 was deemed to be an application by Respondent for an exemption, pursuant to ORC § 3734.02(G) and OAC rule 3745-50-31, excluding their proposed remedial activities from regulation under the hazardous waste requirements pursuant to ORC Chapter 3734 and the rules promulgated thereunder, as well as the State's laws and rules regarding the open dumping of solid waste and illegal disposal of construction and demolition debris. The IA Work Plan described the proposed methods for managing materials at the Facility and stated that specified activities at the Facility would be performed within an Area of Contamination designated for the Site. The Area of Contamination Policy is guidance issued by US EPA. As discussed during a September 25, 2012 meeting between the parties, and as set forth in the Preliminary Evaluation Report, the IA Work Plan and the RI/FS Work Plan, Respondent documented that continuous and contiguous contamination is present across the Site and in certain off-property areas, including areas where slag piles extend beyond the property boundary and in the rail spur area at the Site. By letter dated October 19, 2012, Ohio EPA concurred with Respondent that the AOC concept was applicable to the Facility, which would include the off-property areas and rail spur area referenced above.
15. On July 26, 2013, the Director of Ohio EPA issued Director's Final Findings and Orders ("DFFOs") that documented Ohio EPA's approval of the RI/FS Work Plan and the IA Work Plan, and authorized Respondent to perform the work under an exemption pursuant to ORC 3734.02(G). Respondent has since performed numerous interim actions at the Facility pursuant to the DFFOs, which interim actions, among other things, included the off-site disposal of certain hazardous waste at a properly licensed facility. As a result of those interim actions, to Respondent's knowledge, no hazardous wastes remain at the Facility at this time.
16. Subsequent to the 2013 DFFOs, Respondent continued investigative activities at the Site in accordance with the RI/FS Work Plan and miscellaneous addenda to the RI/FS Work Plan. Those activities included sampling the secondary materials referenced in paragraphs 8 and 13 above that Ohio EPA determined had been actively managed by Jefferson Processing and that the agency initially believed exhibited a characteristic of hazardous waste. Respondent's more recent sampling of such secondary materials provided results that determined that the materials did not exhibit a characteristic of hazardous waste. Those activities built upon earlier pre-DFFO investigations and culminated in the preparation of a Final RI Report that was approved by Ohio EPA on February 29, 2024.
17. From 2013 through 2022, Respondent implemented the tasks outlined in the 2012 IA Work Plan, as well as additional tasks that were subsequently approved by Ohio EPA as addenda to the Work Plan. Work that was performed included: establishment of site security; reconstruction of a rail spur onto the site; construction of stormwater controls; removal and disposal of PCB-impacted concrete and soil; collection, bagging and disposal of baghouse dust, either on-

site as solid waste or off-site as hazardous waste; abatement and off-site disposal of asbestos containing materials ("ACMs") and transite roofing and siding; demolition of site structures including the North and South Mill Buildings, silos, and baghouses; installation of a perimeter air monitoring system; sampling and analysis of soils from potential borrow areas; haul road construction and improvement; and a geotechnical slag investigation.

18. On January 25, 2024, Respondent submitted Amendment No. 10 to the IA Work Plan ("Amendment No. 10") for a Slag Consolidation Interim Action to be conducted at the Site. This interim action will result in the excavation, transport, and consolidation of all lowland and upland slag within the Former Mine Area on the northern portion of the Site. Slag will be placed and compacted in a controlled manner to ensure that it achieves adequate strength for stability, and will be covered with clean soil and revegetated to prevent exposure and provide erosion protection. In addition, the interim action work will involve the management of other materials at the Site that would otherwise be subject to regulation under ORC Chapters 3734 and 3714. Amendment No. 10 was approved by Ohio EPA on February 29, 2024.
19. Amendment No. 10 dated January 25, 2024, is deemed to be an application by Respondent for an exemption, pursuant to ORC § 3734.02(G) and OAC rule 3745-27-03(B), excluding their proposed remedial activities from regulation pursuant to ORC Chapter 3734 and the rules promulgated thereunder, including the State's laws and rules regarding the open dumping of solid waste and illegal disposal of construction and demolition debris. In addition, in the unlikely event that Respondent's proposed remedial activities include the excavation, transport and consolidation of materials that might possibly exhibit a characteristic of hazardous waste, Amendment No. 10 is deemed to constitute a request that the director replace the requirements of rules 3745-55-10 to 3745-55-20 with the alternate requirements set out in Amendment No. 10 for the management of such materials. Finally, Amendment No. 10 describes the proposed methods for managing materials at the Facility and states that specified activities at the Facility would be performed within an Area of Contamination designated for the Site. The Area of Contamination Policy is guidance issued by US EPA. By letter dated October 19, 2012, Ohio EPA concurred with Respondent that the AOC concept was applicable to the Facility and certain off-property areas, including areas where slag piles extend beyond the property boundary and in the rail spur area at the Site, as referenced in paragraph 14 above.
20. The approval by Ohio EPA of Amendment No. 10 and in concert with the provisions of the Area of Contamination Policy, and OAC rule 3745-55-10(C), in lieu of compliance with the requirements pursuant to ORC Chapter 3734. and the rules promulgated thereunder, including OAC rules 3745-55-10 to 3745-55-20, during the on-site implementation of Amendment No. 10, is unlikely to adversely affect the public health or safety or the environment. Therefore, the Director finds that the issuance to Respondent of an exemption from the requirements to comply with the solid waste requirements under ORC Chapter 3734 and the rules promulgated thereunder, and the replacement of the requirements of rules 3745-55-10 to 3745-55-20 with the alternate requirements set out in Amendment No. 10 for the management of any materials that might possibly exhibit a characteristic of hazardous waste, during

the on-site implementation of Amendment No. 10, is unlikely to adversely affect the public health or safety or the environment within the meaning of ORC § 3734.02(G) and OAC rule 3745-55-10(C) and is consistent with and equivalent to rules promulgated under the Resource Conservation and Recovery Act of 1976, 90 Stat. 2806, 42 U.S.C. § 6921 et seq., as amended, as long as Respondent complies with the approved Amendment No. 10.

21. Pursuant to ORC § 3714.01, construction and demolition debris includes those materials resulting from the destruction of any physical structure that is built by humans. “Construction and demolition debris does not include materials identified or listed as solid wastes or hazardous waste pursuant to Chapter 3734 of the Revised Code and rules adopted under it . . . or reinforced or nonreinforced concrete, asphalt, building or paving brick, or building or paving stone that is stored for a period of less than two years for recycling into a usable construction material.”
22. OAC rule 3745-400-01(C)(3) states that “clean hard fill” is construction and demolition debris that consists only of reinforced or nonreinforced concrete, asphalt, concrete, brick, block, tile or stone that can be reused as a construction material. Clean hard fill does not include materials contaminated with hazardous waste, solid waste, or infectious waste. OAC rule 3745-400-05(B) provides that “[c]lean hard fill may be stored for a period of less than two years. Clean hard fill stored more than two years shall be considered illegal disposal of construction and demolition debris.”
23. OAC rule 3745-400-01(I)(1) generally provides that “illegal disposal” means the disposal of construction and demolition debris at any place other than a licensed construction and demolition debris disposal facility, a licensed solid waste disposal facility, or as otherwise authorized by OAC Chapter 3714.
24. Pursuant to OAC rule 3745-400-04(B), no person shall conduct or allow illegal disposal of construction and demolition debris.
25. ORC § 3734.01(E) states that “solid wastes” means “unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining, or demolition operations ... and slag and other substances that are not harmful or inimical to public health[.]” That section also provides that solid waste does not include any material that is a hazardous waste.
26. Pursuant to ORC § 3734.01(I), “Open dumping” includes the depositing of solid wastes onto the surface of the ground at a site that is not licensed as a solid waste facility under section 3734.05 of the Revised Code.
27. Pursuant to ORC § 3734.03, no person shall dispose of solid wastes by open dumping.

28. OAC rule 3745-27-03(A) provides that the temporary storage of solid waste other than scrap tires is generally exempt from regulation under OAC Chapter 3745-27. If, however, the storage of the solid waste causes a nuisance or health hazard, it shall be considered open dumping.
29. OAC rule 3745-27-05(D) provides that “[n]o person shall conduct, permit, or allow open dumping. In the event that open dumping is occurring or has occurred at a property, the person(s) responsible for the open dumping, the owner of the property, or the person(s) who allow or allowed open dumping to occur, shall promptly remove and dispose or otherwise manage the solid waste in accordance with Chapter 3734 of the Revised Code, and shall submit verification that the solid waste has been properly managed.”
30. Amendment No. 10 dated January 25, 2024, is deemed to be an application by Respondent for an exemption pursuant to ORC § 3734.02(G), exempting Respondent’s proposed remedial activities during the implementation of the approved RI/FS Work Plan and the approved IA Work Plan, including Amendment No. 10, from regulation under ORC § 3734.03 and OAC rules 3745-27-05(D) and 3745-400-04(B) until a final remedy has been approved for the Facility. The construction and demolition debris at the Facility will be managed together with the solid waste; the combined waste stream is, therefore, solid waste such that it is also governed by the terms of these Orders and the approved IA Work Plan, including Amendment No. 10.
31. The Director finds that the issuance to Respondent of an exemption from the requirements to comply with ORC Chapter 3734 and the rules promulgated thereunder during the implementation of the approved IA Work Plan, including Amendment No. 10, at the Facility is unlikely to adversely affect the public health or safety or the environment, or to create a fire hazard, as long as Respondent complies with the approved IA Work Plan, including Amendment No. 10, and these Orders.
32. Upon the effective date of these Orders, the hazardous waste portion of the exemption granted pursuant to ORC Section 3734.02(G) on July 26, 2013 is terminated. The termination of the hazardous waste portion of the exemption granted in the July 26, 2013 DFFOs shall in no way affect the applicability of the AOC Policy to the Facility.

V. ORDERS

Respondent shall proceed with the implementation of the IA Work Plan, including Amendment No. 10, according to the following terms:

1. The Respondent is hereby exempted from the requirement to comply with the solid waste requirements pursuant to ORC Chapter 3734 and the rules promulgated thereunder, and is hereby granted authority pursuant to OAC rule 3745-55-10(C) to replace the requirements of OAC rules 3745-55-10 to 3745-55-20 with the alternate requirements set out in Amendment No. 10, in the unlikely event that hazardous waste is encountered at the Facility, for the implementation of the IA Work Plan, including Amendment No. 10, at the Facility, provided that Respondent complies with the following:
 - a. Only the wastes currently located at the Facility may be managed within the Area of Contamination;
 - b. Manage the secondary materials that were specifically designated as Jefferson Processing piles pursuant to the approved IA Work Plan, including Amendment No. 10; and
 - c. No other solid or hazardous wastes generated off-site nor any newly generated process waste may be managed at the Facility in accordance with this Order.
2. The Respondent is hereby exempted from the requirements in ORC Chapter 3734 and OAC Chapter 3745-27 governing the management of solid waste, including any construction and demolition debris managed along with the solid waste, other than solid waste or construction and demolition debris that constitutes asbestos or asbestos containing material, during the implementation of the approved IA Work Plan, including Amendment No. 10, provided that the Respondent complies with the following:
 - a. Only solid waste and construction and demolition debris located at the Facility on the effective date of these Orders and/or generated at the Facility as a result of the destruction of structures conducted in accordance with the approved IA Work Plan, including Amendment No. 10, may be managed in accordance with this Order; and
 - b. All materials managed in accordance with this Order shall be managed in accordance with the approved IA Work Plan, including Amendment No. 10.
3. Notwithstanding Section VI of these Orders, the Director may revoke any of the exemptions granted in Section V of these Orders should the Director determine that Respondent's activities at the Facility adversely affect public

health or safety or the environment, create a fire hazard, and/or are not being conducted in accordance with these Orders and/or the approved IA Work Plan, including Amendment No. 10.

VI. TERMINATION

Respondent may request termination of these Orders when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and Ohio EPA acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official(s) of Respondent. For purposes of these Orders, a responsible official is a corporate officer who is in charge of a principal business function of Respondent.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, the operation of Respondent's Facility.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X.NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Ohio Environmental Protection Agency
Southeast District Office
Division of Environmental Response and Revitalization
2195 Front Street
Logan, Ohio 43138
Attn: DERR Manager

and Ohio EPA Central Office at the following addresses:

For mailings, use the post office box number:

Anne M. Vogel, Director
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049
Attn: Assistant Chief

For deliveries to the building:

Anne M. Vogel, Director
Ohio Environmental Protection Agency
Lazarus Government Center
50 West Town Street, Columbus, Ohio 43215
Attn: Manager, Compliance Assurance Section

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

All documents required to be submitted by Ohio EPA pursuant to these Orders shall be addressed to:

Barbara K. Nielsen
Manager, Remediation Projects
Freeport Minerals Corporation
333 North Central Avenue
Phoenix, Arizona 85004

and:

J. Stanton Curry, Esq.
Gallagher & Kennedy P.A.
2575 East Camelback Road
Phoenix, Arizona 85016-9225

and:

Shane A. Farolino, Esq.
Roetzel & Andress
41 S. High Street
Huntington Center, 21st Floor
Columbus, Ohio 43215

or to such persons and addresses as may hereafter be otherwise specified in writing by Respondent.

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges, defenses and causes of action, except as specifically waived in Section XII of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of law, fact, violation or liability, and in lieu of further enforcement by Ohio EPA for only the matters specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these orders are stayed, vacated, or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS SO ORDERED AND AGREED:

OHIO ENVIRONMENTAL PROTECTION AGENCY



Anne M. Vogel, Director
Ohio Environmental Protection Agency

04/19/2024

Date

IT IS SO AGREED:

Cyprus Amax Minerals Company

BY:

Douglas Currault



Digitally signed by Douglas Currault
Date: 2024.04.18 14:57:27 -07'00'

Name:

Date

Title: