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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 2016 AUG -3 PM 1: 38 REGION VIII FILED

IN THE MATTER OF:	EPA REGION VIII HEARING CLERK
US Magnesium LLC,) U.S. EPA Docket No.) RCRA Docket No.
Respondent,) RCRA-08-2016-0004
Proceeding under section 3008(h) of the Resource Conservation and Recovery Act, 42 U.S.C. § 3008(h)	ADMINISTRATIVE ORDER ON CONSENT

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I. BACKGROUND AND JURISDICTION

- 1. This Administrative Order on Consent (Order) is entered into voluntarily by the United States Environmental Protection Agency (EPA) and US Magnesium LLC (Respondent) regarding the magnesium production facility located at Rowley, Utah (Facility). This Order provides for the performance of certain operational changes and corrective action at or in connection with the Facility.
- 2. This Order is issued under section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. § 6928(h). The Administrator of the EPA has delegated the authority to issue orders under section 3008(h) to the Regional Administrator of Region 8 by EPA Delegation Nos. 8-31, dated March 12, 2014, and 8-32, dated May 11, 1994, and this authority has been further delegated by the Regional Administrator for Region 8 to the Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice and by the Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice to, jointly, the supervisors in the Legal Enforcement and Technical Enforcement Programs,
 - 3. The State of Utah has been given notice of the issuance of this Order.
- 4. The United States of America, on behalf of the EPA, filed a complaint in the United States District Court for the District of Utah, Case No. 2:01CV0040B, on January 16, 2001, and a Second Amended Complaint on December 5, 2002 alleging among other things, that Respondent along with other named defendants violated RCRA, 42 U.S.C. §§ 6901 et seq., at the Facility with respect to certain enumerated wastes (Complaint Wastes). This Order does not resolve all of Respondent's or any other defendants' alleged liability in the District Court Case other than for the Work undertaken by Respondent hereunder.
- 5. Respondent denies the applicability of Subtitle C of RCRA and the regulations promulgated thereunder to certain practices and wastes at the Facility that are the subject of the District Court Case, denies the violations alleged in the Complaint and the Second Amended Complaint, and maintains that the Facility has been and remains in compliance with RCRA and that Respondent is not liable for civil penalties or injunctive relief arising out of the transactions or occurrences alleged in the Complaint and Second Amended Complaint.
- 6. Respondent has agreed to perform certain operational changes and corrective action at or in connection with the Facility pursuant to this Order. It is the intention of the Parties to incorporate this Order into a consent decree to be filed in the District Court at some future time.
- 7. Respondent has conducted itself in good faith in its discussions with the EPA concerning the violations alleged in the Complaint, and has already commenced implementation of certain operational changes and corrective measures at the Facility.
- 8. The EPA and Respondent recognize that this Order has been negotiated in good faith. Respondent consents to, and agrees not to contest the EPA's jurisdiction to issue this Order or to enforce its terms. Further, Respondent will not contest the EPA's jurisdiction to: compel compliance with this Order in any subsequent enforcement proceedings, either administrative or judicial; require Respondent's full or interim compliance with the terms of this Order; or impose sanctions for violations of this Order. Respondent waives any right to request a hearing on this matter pursuant to section 3008(b) of RCRA, 42 U.S.C. § 6928(b), and 40 C.F.R. Part 24, and consents to the issuance of this

Order without a hearing under section 3008(b) of RCRA, 42 U.S.C. § 6928(b), as an Administrative Order on Consent issued pursuant to section 3008(h) of RCRA, 42 U.S.C. § 6928(h). Nothing in this Order shall be construed to address any matter other than the implementation of the Work required by this Order. The EPA and Respondent make no admissions and reserve all rights and defenses with respect to such other matters.

II. PARTIES BOUND

- 9. The obligations of this Order apply to and are binding upon Respondent and the EPA as set forth herein, and upon any successors, assigns, or other entities or persons otherwise bound by law.
- 10. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Respondent of its obligation to ensure that the terms of this Order are implemented unless: the transferee agrees to undertake the obligations required by this Order and to be substituted for Respondent under this Order; and the EPA consents to relieve Respondent of its obligations. The EPA's decision to refuse to approve the substitution of the transferee for the Respondent shall not be subject to judicial review. At least thirty (30) days prior to such transfer, Respondent shall provide a copy of this Order to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to the EPA in accordance with Section XIV (Notices). Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Order.
- 11. Respondent shall provide a copy of this Order to all officers, employees, and agents whose duties include compliance with any provision of this Order, as well as to any contractor retained to perform work required under this Order. Respondent shall condition any such contract upon performance of the work in conformity with the terms of this Order.

III. STATEMENT OF PURPOSE

12. In entering into this Order, the mutual objectives of the EPA and Respondent are to implement operational changes and corrective action at the Facility as identified in this Order.

IV. DEFINITIONS

- 13. Unless otherwise expressly provided in this Order, terms used in this Order that are defined in RCRA, 42 U.S.C. §§ 6901-6992k, shall have the meaning assigned to them in RCRA. Whenever terms listed below are used in this Order or its Appendices, the following definitions shall apply solely for purposes of this Order:
- a. "Active Pond" shall mean the approximately 400 acre pond currently receiving wastewater from the Facility;
- b. "Anode Dust" shall mean particulate matter in exhaust gases from the electrolytic cells;
- c. "Bevill-Exempt Wastes" shall mean wastes exempt under the Bevill Amendment, 40 C.F.R. §261.4(b)(7), Utah Admin, R. R315-261-4(b)(7).

- d. "CHCs" shall mean Chlorinated Hydrocarbons, which are hydrocarbon molecules where one or more hydrogen atoms have been replaced by chlorine atoms:
- e. "Chlorine Plant Water Wash Column Water" shall mean scrubber solution generated in the water wash column from the scrubbing of residual Anode Dust and hydrogen chloride gas from electrolytic cell exhaust gases;
- f. "Chlorine Reduction Burner Water" shall mean scrubber solution generated in the chlorine reduction burner from the scrubbing of melt/reaction exhaust gases;
- g. "Chlorine Reduction Burner Seal Leg Water" shall mean any upsets or overflows of scrubber solution used in devices that protect equipment and ducting from pressure surges;
- h. "Complaint Wastes" are Anode Dust, Chlorine Reduction Burner Water, Chlorine Reduction Burner Seal Leg Water, High Energy Scrubber Liquor, and Chlorine Plant Water Wash Column Water;
- i. "Day or day" shall mean a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day;
- j. "District Court" shall mean the United States District Court for the District of Utah;
- k. "Effective Date" shall mean the effective date of this Order as provided in Section XV (Effective Date);
- l. "The EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities;
- m. "Facility" shall mean the magnesium production facility at Rowley, Utah, located approximately 23 miles northwest of Grantsville, Utah, owned and operated by Respondent;
- n. "Hazardous Constituents" shall mean those constituents listed in Appendix VIII to 40 C.F.R. Part 261 or any constituent identified in Appendix IX to 40 C.F.R. Part 264;
- o. "Hazardous Waste" shall mean hazardous waste as defined in sections 1004(5) and 3001 of RCRA and 40 C.F.R. Part 261 and Utah Code Ann. 19-6-102(10));
- p. "High Energy Scrubber Liquor" shall mean the scrubber solution used to remove residual particulate matter from melt/reaction exhaust gases;
 - q. "Interest" shall mean the interest rate specified in 28 U.S.C. § 1961;
- r. "Order" shall mean this Administrative Order on Consent and its Appendices. Deliverables approved by the EPA also will be incorporated and enforceable under this Order. In the event of any conflict between this Order and any Appendix, this Order shall control;
- s. "Paragraph" shall mean a portion of this Order identified by an Arabic numeral or an upper or lower case letter;

- t. "Parties" shall mean the EPA and Respondent;
- u. "RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act);
- v. "RCRA Carve-Out Cleanup Project" shall mean cleanup of the ditches and sanitary lagoon at the Facility, as denoted in Appendix 1 (RCRA Carve-Out Cleanup Project Area Map);
 - w. "Respondent" shall mean US Magnesium LLC;
 - x. "Section" shall mean a portion of this Order identified by a Roman numeral;
 - y. "State" shall mean the State of Utah;
- z. Statement of Work or SOW shall mean the document attached hereto as Appendix 2 describing the activities Respondent must perform to implement the Work required by this Order.
- aa. "Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise;
- bb. "Work" shall mean all activities and obligations Respondent is required to perform under this Order, except those required by Section XII (Information Collection and Retention).

V. THE EPA'S FINDINGS OF FACT

- 14. Respondent is a limited liability company formed under Delaware law with its principal place of business in the State of Utah.
 - 15. Respondent has owned and operated the Facility since 2002.
- 16. The Facility is located at Rowley, Tooele County, Utah, and its mailing address is 238 North 2200 West, Salt Lake City, Utah 84116.
- 17. The Facility produces magnesium using an anhydrous electrolytic production process. In addition to magnesium metal and alloys, the facility produces chlorine, ferric and ferrous chloride, and calcium chloride, and is producing or has produced other materials as well. The main raw material is concentrated brine from the Great Salt Lake.
- 18. The Facility has at all times pertinent to this Order discharged waste streams from production processes into several ditches, all of which aggregate into a ditch that flows into the Active Pond. The waste streams and the Active Pond each have a pH of approximately 1.
- 19. The Facility has at all times pertinent to this Order generated a solid waste (Anode Dust) and four waste waters (Chlorine Plant Water Wash Column Water, High Energy Scrubber Liquor, Chlorine Reduction Burner water, and Chlorine Reduction Burner Seal Leg Water). These Complaint Wastes are all "solid wastes" as defined at section 1004(27) of RCRA, 42 U.S.C. § 6903(27) and Utah Code Ann. 9-6-102(19)(a) that have been disposed of at the Facility.

- 20. Each of the Complaint Wastes exhibits or has exhibited at least one characteristic of hazardous waste pursuant to Utah's RCRA-authorized program, Utah Code Ann. §§ 19-6-101 to 123.
- 21. Anode Dust and certain other liquid "solid" waste streams at the Facility contain dioxins, furans, hexachlorobenzene, and polychlorinated biphenyls.
- 22. Dioxins and furans are hazardous constituents as provided at 40 C.F.R. Part 261, Appendix VIII, and Utah Admin. R. § R315-261-1092.
- 23. Hexachlorobenzene is a hazardous constituent as provided at 40 C.F.R. Part 261, Appendix VIII, and Utah Admin, R. § R315-261-1092.
- 24. Polychlorinated biphenyls are hazardous constituents as provided at 40 C.F.R. Part 261, Appendix VIII, and Utah Admin. R. § R315-261-1092.

VI. THE EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

- 25. Based on the EPA's Findings of Fact set forth above, the EPA has concluded and determined that:
 - a. Respondent is a "person" within the meaning of section 1004(15) of RCRA;
 - b. Respondent is the owner and/or operator of the Facility;
- c. Certain wastes found at the Facility are hazardous wastes pursuant to sections 1004(5) and 3001 of RCRA and 40 C.F.R. Part 261;
- d. None of the Complaint Wastes are exempt from RCRA regulatory requirements of Subtitle C as Bevill-Exempt Wastes;
- e. Respondent is required to operate the Facility as a Treatment, Storage and Disposal Facility pursuant to sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924 and 6925, and the corresponding federal and/or state regulations;
- f. Based on the EPA's inspections, observations, and analytical sampling, there is or has been a release of hazardous wastes and/or hazardous constituents into the environment from the Facility;
- g. The actions required by this Order may be necessary to protect human health and/or the environment.

VII. WORK TO BE PERFORMED

- 26. Respondent shall complete the work requirements described in this Section. Respondent shall implement the RCRA Carve-Out Cleanup Project, which will consist of the following elements:
- a. Wastewater currently discharged to the ditches will be conveyed to the Active Pond through pipes in accordance with a wastewater discharge piping system plan. This plan may include locating pipes within the boundaries of existing ditches.

- b. Abandon the wastewater ditches through backfilling and capping contaminated soils and sediments within or adjacent to the ditches. Dredge spoils adjacent to the ditches will be placed into the ditch network. Contaminated soils, if any, in other areas within the RCRA Carve-Out Cleanup Project Area, including the future filtration plant area, may be placed into the ditch network or, as described in paragraph 26.e, capped, to be determined during the corrective measures design. The ditches will be backfilled to grade and capped using clean clayey soils extracted from on-site borrow pits or other suitable on-site sources, or other suitable barrier.
- c. Excavate contaminated sediments in the outer main ditch for consolidation with the contaminated ditch sediments within the central ditch network sediments. Depth and lateral area will be determined during the corrective measures design using information gathered from CERCLA investigative studies. EPA will work with Respondent to develop a suitable protocol that will appropriately define the amount of confirmatory sampling. The activities called for in this subparagraph will not be required if the Utah Division of Water Quality and EPA have approved a retrofit option for the Active Pond before these activities are scheduled to occur under the CMI work plan to be developed in accordance with the SOW required by paragraph 27.
- d. The sanitary lagoon will be either refurbished to remain in operation or abandoned, to be determined during the corrective measures design. Dredge spoils adjacent to the sanitary lagoon will be placed into the ditch network. If the sanitary lagoon is refurbished, the corrective measures design will specify requirements for closure of the sanitary lagoon at the end of its operation. If the sanitary lagoon is abandoned, it will be closed in place through backfilling and capping, or contaminated soils in the sanitary lagoon will be excavated and placed in the ditch network, to be determined during the corrective measures design.
- e. Install a minimum 2 feet cap using clayey soils extracted from on-site borrow pits or other suitable on-site sources or other suitable barrier on the closed ditches, and, if applicable, on other contaminated areas within the RCRA Carve-Out Cleanup Project Area, to eliminate burrowing animals and minimize water infiltration. Cap design to reduce infiltration must include topographical design to promote runoff, and run-on controls. Capping necessary to minimize water infiltration will not be required if the Utah Division of Water Quality and EPA have approved a retrofit option for the Active Pond before these activities are scheduled to occur under the CMI work plan to be developed in accordance with the SOW required by paragraph 27.
 - f. Develop and implement soil vapor assessment and, if necessary, mitigation.
- g. Establish institutional controls and post suitable warning signs to manage risk within the RCRA Carve-Out Cleanup Project area.
- 27. Within three hundred (300) Days of the Effective Date, Respondent shall submit a work plan for the corrective measures implementation (CMI) of the RCRA Carve-Out Cleanup Project in accordance with the SOW attached hereto as Appendix 2. The CMI work plan shall outline the design, construction, operation, maintenance and monitoring of all actions to be taken to implement these corrective measures. The CMI work plan shall also include a schedule for expeditious implementation of the RCRA Carve-Out Cleanup Project.
- 28. Respondent has implemented the Emergency Offgas System (EOG) Redesign Plan attached hereto as Appendix 3 (Memorialization of Emergency Offgas System Redesign). Any fugitive emissions controls installed at the EOG as of the Effective Date of this Order shall not be removed or

reconfigured unless Respondent, on a schedule approved by the EPA, installs alternative fugitive emissions controls that meet or exceed the performance of the current controls. Respondent, in making any changes to processes or operations in the melt/reactor or electrolytics buildings that have the potential to increase fugitive emissions, or render existing controls less effective, shall submit to the EPA for approval, within thirty (30) Days of making such changes, a plan and schedule to assess and minimize fugitive emissions relating to such changes, and shall implement the approved plan on the approved schedule. This Paragraph does not require Respondent to seek approval from the EPA for process or operational changes made by Respondent.

29. Permits. Where any compliance obligation under this Section requires Respondent to obtain a federal, state, or local permit or approval, Respondent shall submit timely and complete applications and take such actions as are necessary to obtain all such permits or approvals. Respondent may seek relief under the provisions of Section XI (Force Majeure) of this Order for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Respondent has submitted timely and complete applications and has taken such actions as are necessary to obtain all such permits or approvals.

VIII. AGENCY APPROVALS

- 30. For any plan, report, or other item that is required to be submitted to the EPA for approval pursuant to this Order, the EPA shall in writing:
 - a. approve the submission; or
 - b. approve the submission upon specified conditions; or
 - c. approve part of the submission and disapprove the remainder; or
 - d. disapprove the submission.

In the event of disapproval of any portion of any such submission, the EPA shall include a statement of the reasons for such disapproval in its response.

- 31. If the submission is approved pursuant to Paragraph 30.a, Respondent shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 30.b or 30.c, Respondent shall, upon written direction from the EPA, take all actions required by the approved plan, report, or other item that the EPA determines are technically severable from any disapproved portions, subject to Respondent's right to dispute only the specified conditions or the disapproved portions, under Section XIII (Dispute Resolution) of this Order. The EPA's receipt or acceptance of information or notice, or approval of a submittal does not bind EPA to the factual assertions and conclusions of the information, notice or submittal.
- 32. If the submission is disapproved in whole or in part pursuant to Paragraph 30.c or 30.d, Respondent shall, within forty-five (45) Days or such other time as the EPA and Respondent agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof. If the resubmission is approved in whole or in part, Respondent shall proceed in accordance with the approved plan.

- 33. Any stipulated penalties that would have been applicable based on the schedule of the original submission that was not approved, as provided in Section X (Stipulated Penalties) of this Order, shall accrue during the 45-Day period referred to in Paragraph 32 or other period as the EPA and Respondent agree to in writing, but shall not be payable unless the revised submission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Respondent's obligations under this Order, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent revised submission.
- 34. If a revised plan, report, or other item, or portion thereof that Respondent submits, is disapproved in whole or in part, the EPA may again require Respondent to correct any deficiencies, in accordance with Paragraphs 31 through 33, or may itself correct any deficiencies, subject to Respondent's right to invoke Dispute Resolution and the right of the EPA to seek stipulated penalties as provided in the preceding Paragraphs.

IX. REPORTING REQUIREMENTS

- 35. On or before January 31st and July 31st of each year following the effective date of this Order, and continuing until termination of this Order pursuant to Section XVII (Termination and Satisfaction), Respondent shall submit a report for the preceding six months that shall include, in reference to the Work to be performed under this Order:
 - a. the status of any construction or compliance measures;
 - b. completion of milestones;
- c. problems encountered or anticipated, together with implemented or proposed solutions;
 - d. status of permit applications;
 - e. reports to state agencies;
 - f. operation and maintenance difficulties or concerns;
- g. a description of any non-compliance with the requirements of this Order and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Respondent shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within thirty (30) Days of the date Respondent becomes aware of the cause of the violation. Nothing in this Paragraph 35.g or Paragraph 36 relieves Respondent of its obligation to provide the notice required by Section XI (Force Majeure) of this Order.
- 36. If Respondent violates, or has reason to believe that it may violate, any requirement of this Order, Respondent shall notify the EPA of such violation and its likely duration, in writing, within ten (10) Days of the date Respondent first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.

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- 37. Whenever any violation of this Order or any other event affecting Respondent's performance under this Order or the operation of the Facility may pose an immediate threat to the public health or welfare or the environment, Respondent shall notify the EPA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Respondent first knew of the violation or event. This requirement is in addition to the requirements set forth in Paragraphs 35 and 36.
- 38. All reports submitted by Respondent under this Section IX (Reporting Requirements) shall be submitted to the persons designated as representatives of the EPA in Section XIV (Notices) of this Order.
- 39. Each report submitted by Respondent under this Section IX (Notices) shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

- 40. The reporting requirements of this Order do not relieve Respondent of any reporting obligations required by RCRA or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
- 41. Any information provided pursuant to this Order may be used by the EPA in any proceeding to enforce the provisions of this Order and as otherwise permitted by law.

X. STIPULATED PENALTIES

- 42. Respondent shall be liable for stipulated penalties to the EPA for violations of this Order as specified below, unless excused under Section XI (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Order, including any work plan or schedule approved under this Order, according to all applicable requirements of this Order and within the specified time schedules established by or approved under this Order.
- 43. The following stipulated penalties shall accrue per violation per Day for each violation of the Work to be performed identified in Section VII (Work to be Performed):

Penalty per Violation per Day Period of Noncompliance

\$3,000 1st through 14th day \$4,000 15th through 30th day

Penalty per Violation per Day Period of Noncompliance

\$5,000 31st day and beyond

44. The following stipulated penalties shall accrue per violation per Day for each violation by Respondent of the requirements of Section IX (Reporting Requirements) of this Order:

Penalty per Violation per Day Period of Noncompliance

\$1,000	1 st through 14 th day
\$2,000	15 th through 30 th day
\$3,000	31st day and beyond

- 45. Stipulated penalties under this Section X (Stipulated Penalties) shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Order.
- 46. Except as provided in Paragraph 47, Respondent shall pay any stipulated penalty within thirty (30) Days of receiving the EPA's written demand. The EPA may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due under this Order.
- 47. Stipulated penalties shall continue to accrue as provided in Paragraphs 43, 44, and 45 during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of the EPA that is not appealed to the Court, Respondent shall pay accrued penalties determined to be owing, together with Interest, to the EPA within thirty (30) Days of the effective date of the agreement or the receipt of the EPA's decision or order.
- b. If the dispute is appealed to the District Court and the EPA prevails in whole or in part, Respondent shall pay all accrued penalties determined by the District Court to be owing, together with Interest, within sixty (60) Days of receiving the District Court's decision or order, except as provided in subparagraph c, below.
- c. If the EPA or Respondent appeals the District Court's decision, Respondent shall pay all accrued penalties determined to be owing, together with Interest, within fifteen (15) Days of receiving the final appellate court decision.
- 48. Respondent shall pay any stipulated penalty owing to the EPA by money order, certified check, company check, electronic funds transfer, or cashier's check payable to the Treasurer of the United States within thirty (30) days of Respondent's receipt of the EPA's request, and shall be submitted to the following address:

Regional Hearing Clerk (8RC) U.S. EPA, Region 8 Cincinnati Finance Center P.O. Box 979077 St. Louis, MO 63197-9000 The transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

- 49. The RCRA docket number for this Order should be clearly typed on the check to ensure proper credit. Respondent shall send simultaneous notices of such payments, including copies of the money order, certified check, company check, electronic funds transfer, or cashier's check to the following: Director, Technical Enforcement Program U.S. EPA, Region 8 1595 Wynkoop Street Denver, CO 80202. Respondent may dispute an EPA determination that it failed to comply with this AOC by invoking the dispute resolution procedures under Section XIII (Dispute Resolution) unless the matter has already been in or is the subject of dispute resolution. Penalties shall accrue but need not be paid during the dispute resolution period. If Respondent does not prevail upon resolution, all penalties shall be due to the EPA within 30 days of resolution of the dispute. If Respondent prevails upon resolution, no penalties shall be paid. In the event that Respondent prevails in part, penalties shall be due on those matters in which Respondent did not prevail.
- 50. If Respondent fails to pay stipulated penalties according to the terms of this Order, Respondent shall be liable for Interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the EPA from seeking any remedy otherwise provided by law for any failure by Respondent to pay any stipulated penalties.
- 51. Subject to the provisions of Section XVII (Termination and Satisfaction) of this Order, the stipulated penalties provided for in this Order shall be in addition to any other rights, remedies, or sanctions available to the EPA for Respondent's violation of this Order or applicable law. Provided however, that where a violation of this Order is also a violation of a relevant statutory or regulatory requirement, Respondent shall be allowed a credit for any stipulated penalties paid against any statutory penalty imposed for such violation. Where a violation of this Order is also a violation of RCRA or its implementing regulations, Respondent shall be allowed a credit for any stipulated penalties paid against any statutory penalties imposed for such violation.

XI. FORCE MAJEURE

- 52. "Force majeure," for purposes of this Order, is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent or Respondent's contractors that delays or prevents the performance of any of Respondent's obligations under this Order despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure event, to minimize the delay and any adverse effects of the delay to the greatest extent possible. "Force Majeure" does not include Respondent's financial inability to perform any obligation under this Order.
- 53. If any event occurs or has occurred that may delay the performance of any obligation under this Order and for which Respondent intends or may intend to assert a claim of force majeure, Respondent shall provide notice orally or by electronic or facsimile transmission to the EPA within seventy-two (72) hours of when Respondent first knew that the event might cause a delay. Within seven (7) Days thereafter, Respondent shall provide in writing to the EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate

the delay or the effect of the delay; Respondent rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Respondent shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, or Respondent's contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondent from asserting any claim of force majeure regarding that event, provided, however, that if the EPA, despite the late notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 52 and whether Respondent has exercised best efforts under this Paragraph, the EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely notices under this Paragraph.

- 54. If the EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Order that are affected by the force majeure event will be extended by the EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. The EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.
- 55. If the EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, the EPA will notify Respondent in writing of its decision.
- 56. If Respondent elects to invoke the dispute resolution procedures set forth in Section XIII (Dispute Resolution) of this Order, it shall do so no later than fifteen (15) Days after receipt of the EPA's notice. In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of Paragraphs 53 and 54 above. If Respondent carries this burden, the delay at issue shall be deemed not to be a violation by Respondent of the affected obligation of this Order identified to the EPA and the District Court.

XII. INFORMATION COLLECTION AND RETENTION

- 57. The EPA and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into the Facility at all reasonable times, upon presentation of credentials, to:
 - a. monitor the progress of activities required under this Order;
- b. verify any data or information submitted to the EPA in accordance with the terms of this Order;
- c. obtain samples and, upon request, splits of any samples taken by Respondent or its representatives, contractors, or consultants;
 - d. obtain documentary evidence, including photographs and similar data; and

- e. assess Respondent's compliance with this Order.
- 58. Upon request, Respondent shall provide splits of any samples taken by Respondent to the EPA or its authorized representatives. Upon request, the EPA shall provide splits of any samples taken by the EPA to Respondent.
- 59. Until five years after the termination of this Order, Respondent shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Respondent's performance of its obligations under this Order. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the EPA, Respondent shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.
- 60. At the conclusion of the information-retention period provided in Paragraph 59, Respondent shall notify the EPA at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of Paragraph 59 and, upon request by the EPA Respondent shall deliver any such documents, records, or other information to the EPA.
- 61. In connection with any request for documents, records, or other information pursuant to this Order, Respondent may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide the following:
 - a. the title of the document, record, or information;
 - b. the date of the document, record, or information;
 - c. the name and title of each author of the document, record, or information;
 - d. the name and title of each addressee and recipient;
 - e. a description of the subject of the document, record, or information; and
 - f. the privilege asserted by Respondent.

However, Respondent shall not assert a legal privilege for any data, records, or information generated or received in connection with Respondent's obligations pursuant to the requirements of this Order.

- 62. Respondent may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Respondent seeks to protect as CBI, Respondent shall follow the procedures set forth in 40 C.F.R. Part 2 and/or the confidentiality orders previously entered in the District Court Case.
- 63. This Order in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the EPA pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Respondent to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XIII. DISPUTE RESOLUTION

- 64. The dispute resolution procedures set forth in this Section XIII (Dispute Resolution) shall be the exclusive mechanism to resolve disputes between the EPA and Respondent regarding this Order. Respondent's failure to seek resolution of a dispute under this Section XIII (Dispute Resolution) shall preclude Respondent from raising any disputed issue as a defense to an action by the United States to enforce any obligation of Respondent arising under this Order.
- 65. Respondent may initiate Informal Dispute Resolution according to the provisions outlined in Paragraphs 65.a through 65.c.
- a. Any dispute between the EPA and the Respondent shall first be the subject of informal negotiations, which may include any third-party assisted, non-binding alternative dispute resolution process agreeable to the EPA and Respondent. The dispute shall be considered to have arisen when Respondent sends the EPA a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute.
- b. The period of informal negotiations shall not exceed twenty (20) Days from the date the dispute arises, unless that period is modified by written agreement.
- c. If the EPA and Respondent cannot resolve a dispute by informal negotiations, then the position advanced by the EPA shall be considered binding unless, within thirty (30) Days after the conclusion of the informal negotiation period, Respondent invokes Formal Dispute Resolution procedures as set forth in Paragraphs 66 through 67.
- 66. If Respondent elects to invoke Formal Dispute Resolution, Respondent shall, within thirty (30) Days after the conclusion of the informal negotiation period, serve on the EPA a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Respondent's position and any supporting documentation relied upon by Respondent.
- 67. The EPA shall serve its Statement of Position on Respondent within forty-five (45) Days of receipt of Respondent's Statement of Position. The EPA's Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the EPA. The EPA's Statement of Position shall be binding upon the Parties, unless the EPA and Respondent agree to the exchange of supplemental Statements of Position or Respondent files a motion for judicial review of the dispute in accordance with Paragraphs 68 through 70.b.
- 68. Respondent may seek judicial review of the dispute by filing in the District Court and serving on the United States in accordance with Section XIV of this Order (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within ten (10) Days of receipt of the EPA's Statement of Position pursuant to Paragraph 67. The motion shall contain a written statement of Respondent's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Order.

- 69. The EPA shall respond to Respondent's motion within the time period allowed by the Local Rules applicable to the District Court Case. Respondent may file a reply memorandum, to the extent permitted by the Local Rules.
- 70. The standard of review for disputes shall follow the provisions of Paragraph 70.a and 70.b.
- a. Except as otherwise provided in this Order, in any dispute accorded record review and pertaining to the adequacy of the performance of work undertaken pursuant to this Order or pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules, or any other items requiring approval by the EPA under this Order, or that is accorded review on the administrative record under applicable principles of administrative law, Respondent shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.
- b. Except as otherwise provided in this Order, in any other dispute, Respondent shall bear the burden of demonstrating that Respondent's position complies with this Order and furthers the objectives of this Order.
- 71. The invocation of dispute resolution procedures under this Section XIII (Dispute Resolution) shall not, by itself, extend, postpone, or affect in any way, any obligation of Respondent under this Order, unless and until final resolution of the dispute so provides, or unless the EPA agrees otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraphs 47.a. through 47.c. If Respondent does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section X (Stipulated Penalties) of this Order.

XIV. NOTICES

72. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Order, they shall be made in writing and addressed as follows:

TO THE EPA:

Andrew J Lensink
Senior Attorney
Legal Enforcement Program
US Environmental Protection Agency Region VIII
1595 Wynkoop Street
Denver CO 80202

TELEPHONE: (303) 312-6908

FAX: (303) 312-6953

E-MAIL: Lensink.Andy@epa.gov

AND:

David Duster Environmental Scientist 8ENF-RC US Environmental Protection Agency Region VIII 1595 Wynkoop Street Denver CO 80202

TELEPHONE: (303) 312-6665

FAX: (303) 312-6953

E-MAIL: Duster.David@epa.gov

AND:

Ann Stephanos Office of Civil Enforcement U.S. Environmental Protection Agency 1200 Pennsylvania Avenue NW Washington DC

TELEPHONE: (202) 564-1849

FAX: (202) 564-0019

E-MAIL: Steohanos,ann@epa.gov

TO THE RESPONDENT:

Tom Tripp Plant Manager US Magnesium LLC 238 North 2200 West Salt Lake City, Utah 84116-2912

AND:

M. Lindsay Ford Parsons Behle & Latimer South Main Street, Suite 1800 Salt Lake City, Utah 84111

Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

- 73. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Order or by mutual agreement of the Parties in writing.
- 74. Respondent may and is encouraged to provide notice electronically in lieu of written notice. Any electronic notice shall be by .pdf and shall be sent to the electronic mail addresses set forth for the parties listed above.

XV. RESERVATION OF RIGHTS

75. Notwithstanding any other provisions of this Order, EPA retains all of its authority to take, direct, or order any and all actions necessary to protect public health or the environment or to

prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste or constituents of such wastes, on, at, or from the Facility, or to require investigative, corrective, removal or remedial actions at the Facility, including but not limited to the right to further prosecute the District Court Case, and to bring enforcement actions under RCRA, CERCLA, and any other applicable statutes or regulations.

- 76. Except as provided in Section XI (Force Majeure), EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, that may pertain to Respondent's failure to comply with any of the requirements of this Order, including without limitation the assessment of penalties under section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h)(2).
- 77. This Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, claims, and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States; provided, however, that if Respondent successfully completes the Work in accordance with this Order and receives a Notice of Completion from EPA, EPA will not seek to compel Respondent to perform the same Work in a subsequent proceeding or action.
- 78. Nothing in this Order shall be used as evidence in support of any claim that the preenforcement review bar set forth in section 113(h) of CERCLA, 42 U.S.C. § 9613(h) has been abrogated or waived.
- 79. This Order is not intended to be nor shall it be construed to be a permit. EPA's approval of the Work and/or workplan does not constitute a warranty or representation that the Work and/or workplans will achieve required clean-up or performance standards. Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations. Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with the Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study, CERCLA docket Number 08-2011-0013, issued by EPA on August 4, 2011.
- 80. Except as provided in Section XIII (Dispute Resolution), Respondent agrees not to contest this Order or any action or decision by the EPA pursuant to this Order, including without limitation, decisions of the Regional Administrator, or any authorized representative of the EPA prior to EPA's initiation of a judicial action to enforce this Order, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Order. In any action brought by EPA for violation of this Order, Respondent shall bear the burden of proving that the EPA's actions were arbitrary and capricious and not in accordance with law.

XVI. EFFECTIVE DATE

81. The Effective Date of this Order shall be the date upon which it is fully executed by the Parties.

XVII. TERMINATION AND SATISFACTION

82. After Respondent has completed the requirements of Section VII (Work to be Performed) of this Order, has thereafter maintained satisfactory compliance with this Order for a period of five (5)

years, and has paid any accrued stipulated penalties not waived or reduced by the EPA pursuant to Paragraph 48 of this Order, Respondent may request that the EPA issue a determination that Respondent has met the requirements of this Order. Within thirty (30) days after Respondent requests such a determination, Respondent shall submit to the EPA a Final Report summarizing the actions taken to comply with this Order, including but not limited to when it met each major milestone deadline.

83. When the EPA determines, after the EPA's review of the Final Report, that all Work has been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, including Section XII (Information Collection and Retention), the EPA will provide written notice to Respondent (the "Notice of Completion"). If the EPA determines that such Work has not been completed in accordance with this Order, the EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the affected workplan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved workplan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified workplan shall be a violation of this Order.

XVIII. APPENDICES

The following appendices are attached to this Order: The following appendices are attached to and part of this Consent Decree:

Appendix 1 is a map of the RCRA Carve-Out Cleanup Project Area; Appendix 2 is the SOW;

Appendix 3 is Respondent's memorialization of the Emergency Offgas System ("EOG") redesign at the Facility.

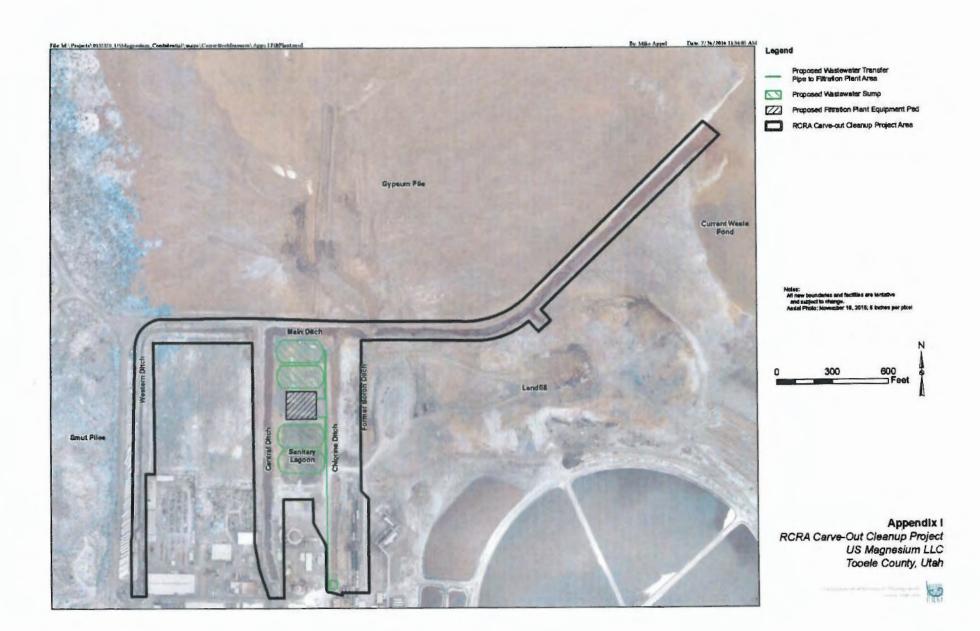
Agreed this 3-2 day of August, 2016.

For Respondent US Magnesium LLC:

Ron Thayer, President and Chief Executive Officer

It is so ORDERED AND AGREED.

BY:_	Clan 12 DATE: 8/3/10 Aaron Urdiales
	Director, RCRA/CERCLA Technical Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency
BY:_	Andrea Madigan Supervisory Attorney, Legal Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency
EFFE	CTIVE DATE: 8 3 16



Appendix 2 Statement of Work

DOCUMENT OR ACTIVITY	DATE
CMI Work Plan contractor	
USM select CMI Work Plan contractor	120 days after Effective Date of AOC
CMI Work Plan	
USM submit draft Corrective Measures	300 days after Effective Date of AOC
Implementation (CMI) work plan to EPA	
EPA provide written comments on draft CMI	30 days after receipt of draft CMI work plan
work plan	
USM provide written response to EPA comments	30 days after receipt of written EPA
on draft CMI work plan and submit final CMI	comments
work plan to EPA	
EPA approve Final CMI work plan	15 days after receipt of Final CMI work plan
Wastewater discharge piping system plan	
USM submit to EPA draft wastewater discharge	120 days after approval of CMI work plan
piping system plan to convey wastewater to the	
pond, in preparation for ditch closure.	
EPA provide written comments on draft	30 days after receipt of draft wastewater
wastewater discharge piping system plan	discharge piping system plan
USM respond to EPA comments on draft plan and	15 days after receipt of written EPA
submit final plan to EPA	comments
EPA approve final wastewater piping system plan	15 days after receipt of final wastewater
	discharge piping system plan
USM order pipe for wastewater discharge system	30 days after EPA approval of final
	wastewater discharge piping system plan
USM complete installation of wastewater	180 days after USM receives delivery of
discharge piping system	pipe
Ditch closure plan	
USM submit draft ditch closure plan to EPA	180 days after approval of CMI work plan
EPA provide written comments on draft ditch	30 days after receipt of draft ditch closure
closure plan	plan
USM provide written response to EPA comments	30 days after receipt of written EPA
on draft ditch closure plan and submit final ditch	comments
closure plan to EPA	
EPA approve final ditch closure plan	15 days after receipt of final ditch closure
	plan
USM complete implementation of final ditch	360 days after completion of wastewater
closure plan	discharge piping system installation
Capping plan	
USM submit draft capping plan to EPA	180 days after approval of CMI work plan
EPA provide written comments on draft capping	30 days after receipt of draft capping plan
plan	
USM provide written response to EPA comments	15 days after receipt of written EPA
on draft capping plan and submit final capping	comments
plan to EPA	
EPA approve final capping plan	15 days after receipt of final capping plan
USM complete capping of closed ditches and of	180 days after completion of ditch closure

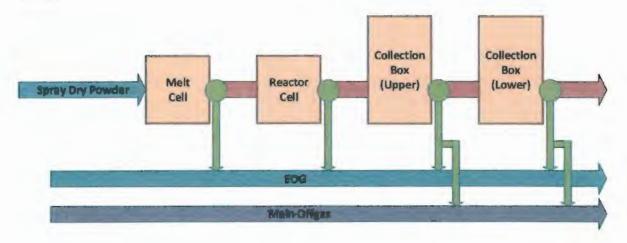
Appendix 2 Statement of Work

DOCUMENT OR ACTIVITY	DATE
contaminated soils, if any, in other areas within	
RCRA Carve-Out Cleanup Project Area	
Soil vapor assessment	
USM Complete soil vapor assessment	90 days after approval of CMI work plan
IF NEEDED, USM submit soil vapor mitigation plan to EPA	90 days after completion of soil vapor assessment
EPA provide written comments on draft soil vapor mitigation plan	30 days after receipt of draft closure plan
USM provide written response to EPA comments on draft soil vapor mitigation plan and submit final soil vapor mitigation plan to EPA	15 days after receipt of written EPA comments
EPA approve final soil vapor mitigation plan	15 days after receipt of final soil vapor mitigation plan
USM implement final soil vapor mitigation plan IF NEEDED	120 days after EPA approval of final soil vapor mitigation plan
Sanitary lagoon refurbishment/closure plan	
USM submit draft plan for refurbishment or closure of sanitary lagoon to EPA	90 days after approval of CMI work plan
EPA provide written comments on draft plan for	30 days after receipt of draft plan for
refurbishment/closure of sanitary lagoon	refurbishment/closure of sanitary lagoon
USM provide written response to EPA comments	15 days after receipt of written EPA
on draft plan for refurbishment/closure of	comments
sanitary lagoon and submit final plan to EPA	
EPA approve final plan for refurbishment/closure	15 days after receipt of final plan for
of sanitary lagoon	refurbishment/closure of sanitary lagoon
USM implement final plan for refurbishment/closure of sanitary lagoon	180 days after EPA approval of final plan

Appendix 3 Memorialization of Emergency Off-gas (EOG) System Redesign

A redesigned EOG ("emergency off-gas") system has been installed to capture fugitive emissions from all melt/reactor trains in the Melt/Reactor building. The redesigned system incorporates modified EOG ducting for each melt and reactor cell (described below) and mounts the main EOG header below the 6th floor (primary operating floor) rather than overhead as in the original arrangement. The redesigned arrangement facilitates access and washing of the EOG header, thereby improving draft control.

A diagram of the system is provided below. Hoods are mounted on the launder at the exit of the melt cell (where the melt cell reamer is located), at the tapping box at the exit of the reactor cell, and on the upper and lower collection boxes. All hoods are connected via stainless steel flex ducting to the EOG header.



Off gas reamers operate to assure the flow of off gas from the melt cells and reactor cells to the scrubbing train. Routine operation of reamers has been eliminated from the reactor cells (but not the melt cells) through changes in operating practices and pressure control. Reactor cells previously were reamed on intervals of approximately 15 minutes (96 times per day). Reactor cells are now reamed nominally once every 24 hours when the cells are in stand-by status (when no chlorine is being introduced and no off gas is flowing). If a reactor cell needs to operate longer than 24 hours (the usual run period), the reamer will be cycled once to make sure the gas path stays open.

The current design of launder lids consists of a solid steel lid with a mineral wool gasket.