UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 7

IN THE MATTER OF:

Madison County Mines Superfund Site
Operable Unit 2
MOD098633415

Missouri Mining Investments, LLC,

Respondent.

Pursuant to Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622.

EPA Docket No.
CERCLA-07-2018-0296

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTIONS

TABLE OF CONTENTS

I.	JURISDICTION AND GENERAL PROVISIONS	1
II.	PARTIES BOUND	1
III.	DEFINITIONS	2
IV.	FINDINGS OF FACT	4
V.	CONCLUSIONS OF LAW AND DETERMINATIONS	8
VI.	SETTLEMENT AGREEMENT AND ORDER	8
VII.	DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND REMEDIAL PROJECT MANAGER	8
VIII.	WORK TO BE PERFORMED	10
IX.	PROPERTY REQUIREMENTS	15
X.	ACCESS TO INFORMATION	17
XI.	RECORD RETENTION	18
XII.	COMPLIANCE WITH OTHER LAWS	19
XIII.	EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES	19
XIV.	PAYMENT OF RESPONSE COSTS	20
XV.	DISPUTE RESOLUTION	22
XVI.	FORCE MAJEURE	23
XVII.	STIPULATED PENALTIES	24
XVIII.	COVENANTS BY EPA	26
XIX.	RESERVATIONS OF RIGHTS BY EPA	26
XX.	COVENANTS BY RESPONDENT	28
XXI.	OTHER CLAIMS	30
XXII.	EFFECT OF SETTLEMENT/CONTRIBUTION	30
XXIII.	INDEMNIFICATION	31
XXIV.	INSURANCE	32
XXV.	FINANCIAL ASSURANCE	32
XXVI.	MODIFICATION	34
XXVII.	ADDITIONAL REMOVAL ACTION	35
XXVIII.	NOTICE OF COMPLETION OF WORK	35
XXIX.	INTEGRATION/APPENDICES	35
XXX.	EFFECTIVE DATE	36

Appendix 1 – General Map of the Madison County Mines Superfund Site
Appendix 2 – Detailed Site Map
Appendix 3 – Statement of Work
Appendix 4 – Supplemental Investigation Work Plan
Appendix 5 – Preliminary Early Removal Action Work Plan
Appendix 6 – Remedial Funds Escrow Agreement

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Missouri Mining Investments, LLC, a Missouri corporation ("Respondent" or "MMI"). This Settlement provides for the performance of a removal action by Respondent and the payment of certain response costs incurred by the United States at or in connection with the "MMI Site" (the "Site") generally located within Operable Unit 2 of the Madison County Mines Superfund Site, in Madison County, Missouri and as depicted in Appendix 1 and Appendix 2.

2. This Settlement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622 (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14A (Determinations of Imminent and Substantial Endangerment, Jan. 31, 2017), 14-14C (Administrative Actions through Consent Orders, Jan. 18, 2017), and 14-14D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, Jan. 18, 2017). This authority was further redelegated by the Regional Administrator of EPA Region 7 to the Director of the Superfund Division by Delegation Nos. R7-14-14A (Apr. 19, 1999), R7-14-14C (Jan. 17, 2017), and R7-14-14D (Jan. 17, 2017).

3. EPA has notified the State of Missouri (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. EPA and Respondent recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV (Findings of Fact) and V (Conclusions of Law and Determinations) of this Settlement. Respondent agrees to comply with and be bound by the terms of this Settlement and further agrees that it will not contest the basis or validity of this Settlement or its terms.

II. PARTIES BOUND

5. This Settlement is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement.

6. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondent to this Settlement.

7. Respondent shall provide a copy of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing Respondent with respect to the Site or the Work, and shall condition all contracts entered into hereunder upon

performance of the Work in conformity with the terms of this Settlement. Respondent or its contractors shall provide written notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Settlement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement, terms used in this Settlement that are defined in CERCLA, or in regulations promulgated under CERCLA, shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply:

"Affected Property" shall mean all real property at the Site and any other real property where EPA determines, at any time, that access or land, water, or other resource use restrictions are needed to implement the removal action.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement, 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.

"Effective Date" shall mean the effective date of this Settlement as provided in Section XXX.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing deliverables submitted pursuant to this Settlement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section IX (Property Requirements) (including, but not limited to, cost of attorney time and any monies paid to secure or enforce access or land, water, or other resource use restrictions, including, but not limited to, the amount of just compensation), Section XIII (Emergency Response and Notification of Releases), Paragraph 116 (Access to Financial Assurance), Paragraph 95 (Work Takeover), community involvement (including, but not limited to, the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e)), Section XV (Dispute Resolution), and all litigation costs. Future Response Costs shall also include Agency for Toxic Substances and Disease Registry (ATSDR) costs regarding the Site.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at https://www.epa.gov/superfund/superfund-interest-rates.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondent.

"Preliminary Early Removal Action Work Plan" or "Preliminary Work Plan" shall mean the document describing the activities Respondent will perform to implement the removal action pursuant to this Settlement, as set forth in Appendix 5, and any modifications made thereto in accordance with this Settlement.

"Post-Removal Site Control" shall mean actions necessary to ensure the effectiveness and integrity of the removal action to be performed pursuant to this Settlement consistent with Sections 300.415(*l*) and 300.5 of the NCP and "Policy on Management of Post-Removal Site Control" (OSWER Directive No. 9360.2-02, Dec. 3, 1990).

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

"Removal Action Design and Implementation Work Plan" or "RADIWP" shall mean the final detailed work plan Respondent will submit to EPA for approval in accordance with this Settlement, describing the detailed activities Respondent must perform to implement the removal action pursuant to this Settlement, including any modifications made to this Settlement.

"Respondent" shall mean Missouri Mining Investments, LLC ("MMI"), a Missouri limited liability company. The clause "Respondent's Affected Property" means Affected Property owned or controlled by MMI.

"Section" shall mean a portion of this Settlement identified by a Roman numeral.

"Settlement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXIX (Integration/Appendices)). In the event of conflict between this Settlement and any appendix, this Settlement shall control.

"Site" shall mean the portion of Operable Unit 2 of the Madison County Mines Superfund Site comprised of approximately 1,750 acres of property that Respondent

purchased from the Anschutz Mining Corporation in March 2018, located in northeastern Madison County near the City of Fredericktown, Missouri, including but not limited to the A, B, C, D, and E Tailings Piles, various historic mine shafts, the metallurgical pond, the D Tailings Dam, chat piles, the mine dump, the mine decline, the processing area, and impacts from those areas within the boundaries of the approximately 1,750-acre area shown in Appendix 2. The Site does not include the approximately 15.14-acre property known as the "Cooper Property," which includes a former metals refinery and associated waste on that property, or other impacts outside the boundaries of the 1,750-acre area shown in Appendix 2.

"State" shall mean the State of Missouri.

"Statement of Work" or "SOW" shall mean the document describing the activities Respondent must perform to implement the removal action pursuant to this Settlement, as set forth in Appendix 3, and any modifications made thereto in accordance with this Settlement.

"Supplemental Investigation Work Plan" shall mean the document, as set forth in Appendix 4 and any modifications made thereto in accordance with this Settlement, describing the investigatory and characterization activities Respondent must perform to comply with this Settlement and to develop the Removal Action Design and Implementation Work Plan.

"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.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any "pollutant or contaminant" under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

"Work" shall mean all activities and obligations Respondent is required to perform under this Settlement except those required by Section XI (Record Retention).

IV. FINDINGS OF FACT

9. The Site is located in Madison County, Missouri, approximately 80 miles south of St. Louis and in close proximity to the town of Fredericktown. The Site is part of the Madison County Mines Superfund Site, which includes all of Madison County and the portion of the historical Mine LaMotte tract that extends northward into southern St. Francois County, Missouri. The Madison County Superfund Site is in an area known as the Old Lead Belt of Missouri and contains approximately 11 tailings piles and abandoned mine workings, in addition to all other areas impacted by mine waste.

10. The Madison County Mines Superfund Site was listed on the National Priorities List ("NPL") pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on September 29, 2003.

11. The Madison County Mines Superfund Site is divided into seven Operable Units. The Site is located within Operable Unit 2 ("OU2").

12. OU2 is located to the east of Fredericktown and includes the site of the former Madison Mine including tailings piles and impoundments, the former refinery known as the "Cooper Property," and all other areas impacted by mine waste from the Madison Mine and former refinery. The Site is located within OU2, as shown in Appendix 2, and is comprised of approximately 1,750 acres of property that Respondent purchased from the Anschutz Mining Corporation. The Site includes but is not limited to the A, B, C, D, and E Tailings Piles, various historic mine shafts, the metallurgical pond, the D Tailings Dam, chat piles, the mine dump, the mine decline, and the processing area, and impacts from those areas within the boundaries of the approximately 1,750-acre area shown in Appendix 2. The Site does not include the approximately 15.14-acre area known as the "Cooper Property," which includes the former metals refinery and associated waste on that property, or other impacts from mine waste outside the boundaries of the 1,750-acre area.

13. Respondent Missouri Mining Investments, LLC, a limited liability company registered to do business in the State of Missouri, currently owns the Site.

14. Mining at OU2 began in the mid-1840s and has continued intermittently since then. OU2 has produced copper, lead, cobalt, nickel, iron, and small amounts of zinc and silver. Early mining was performed by open-pit methods, while in later years, mining was performed by underground methods. Over the years, activities at OU2 have included, but are not limited to, mining and milling of the ore produced by the Madison Mine and the disposal of various waste materials directly or indirectly associated with on-site activities.

15. Until 1902, the Madison Mine was periodically operated by entities or individuals that are believed to be now defunct or deceased. The North American Lead Company took over operations of the Madison Mine in 1902 with the intent to produce lead. The company sunk the No. 2 shaft and completed a 500-ton mill to recover galena. A smelter and refinery were completed in 1907 in order to recover copper, cobalt, and nickel separated from the lead.

16. In 1917, the Missouri Cobalt Company built a new 300-ton mill and 100-ton smelter at the Madison Mine, and produced lead-bearing galena, which was smelted on site, and a pyrite-bearing concentrate containing cobalt, copper, and nickel sulfides. A refinery for the treatment of nickel and cobalt concentrates was completed in 1919, but operations ceased in 1920 and did not begin again until 1944.

17. The St. Louis Smelting and Refining Division of the National Lead Company ("NL") operated the Madison Mine from 1942 to 1961. Three new shafts were sunk, the mine was dewatered, and mining resumed in 1944. The old mill building was modernized and equipped with flotation equipment where concentrates of lead, copper, cobalt/nickel, and pyrites were produced. A cobalt separation refinery was built in 1952 after the U.S. Government let a contract for the production of strategic materials. The government contract for purchase of cobalt

expired in 1959 and the operations ceased in January 1961. Buildings and storage areas were demolished and the mine was allowed to flood.

18. In 1956, NL transferred the former refinery property of the Madison Mine to the United States. In December 1961, the United States transferred this property to Perry Equipment Corporation, and this property has been transferred to various individuals over the years. This property is now known as the "Cooper Property." Respondent has never owned the Cooper Property and this property is not a part of this Settlement.

19. In 1977, the D tailings dam failed by overtopping when 6 inches of rain fell in a relatively short period of time. As a result, water and sediment carrying mine waste were carried down Tollar Branch Drainage through Fredericktown. The breach in the dam was repaired.

20. The Anschutz Mining Corporation ("Anschutz") purchased a large portion of the Madison Mine, approximately 1,750 acres, from NL in 1979. Portions of what is now OU2 are owned by other parties, including the former refinery property. Anschutz dewatered the mine and rehabilitated the decline and No. 1 shaft. In 1981, underground rehabilitation began, but rehabilitation activities ceased shortly afterwards and the mine was allowed to flood as a result of falling cobalt prices.

21. On March 2, 2018, 2018, MMI purchased the Madison Mine property from Anschutz.

22. Over the years, mining processes at the Site resulted in the production of mill waste materials called chat and flotation tailings.

23. Chat is fine to course dolomite rock fragments produced during the milling process in which density separation was used to separate the ore. Chat was transported mechanically by conveyer and disposed of in piles on the Site.

24. Flotation tailings were produced by the flotation milling process. Tailings typically are smaller fragment silts, fines, silty sands, and clay. The flotation tailings were disposed of by hydraulically depositing them into impoundments known as tailings ponds.

25. A Site Inspection and Expanded Site Inspection conducted for EPA by Jacobs Engineering Group, Inc. in 1995 found concentrations of arsenic, cobalt, copper, iron, lead, manganese, and nickel exceeding EPA's screening criteria for residences. Arsenic sampling results were as high as 447 milligrams/kilogram (mg/kg) with a screening level of 22 mg/kg, cobalt sampling results were as high as 6,000 mg/kg with a screening level of 23 mg/kg, and lead sampling results were found as high as 23,400 mg/kg. All of the lead concentrations for samples from the A, B, C, D, and E Tailings exceeded the EPA screening level of 400 mg/kg for residential properties and 800 mg/kg for industrial purposes.

26. Soil sampling results for a Supplemental Remedial Investigation conducted by Black & Veatch Special Projects Corporation in 2010 revealed lead concentrations at the Site exceeding screening levels for both residential and industrial properties. Sampling results from four soil samples showed lead above 4,000 mg/kg at the Site. Further sampling results for lead from four soil samples were in the range of 800 - 4,000 mg/kg.

27. Soil sampling results for the 2010 Supplemental Remedial Investigation from south of the Met Pond found arsenic, cobalt, iron, lead, and manganese present at concentrations exceeding screening levels for residential properties and, in some cases, exceeding screening levels for industrial properties.

28. Trespassers are known to access the Site on foot and using all-terrain vehicles ("ATVs").

29. Lead is a metal and has been listed as a hazardous waste (D008) in the regulations for RCRA. Lead is classified by EPA as a probable human carcinogen and is a cumulative toxicant. Chronic exposure to low levels of lead has been linked to the existence of developmental disabilities and delays in brain growth and decline in IQ in children, and can inhibit normal physical growth. Lead poisoning in children can have residual cognitive deficits that can still be detected in adulthood. Lead has also been shown to cause various diseases that affect brain function. Symptoms develop following prolonged exposure and include dullness, irritability, poor attention span, chronic pain, constipation, vomiting convulsions, coma, and death. EPA has determined that lead is a probable human carcinogen. Human exposure through ingestion may result in adverse health effects such as damage to the central nervous system, peripheral nervous system, and kidney and blood disorders.

30. Arsenic has been known to produce effects on the cardiovascular system which includes spasm of the digital arteries and constriction of the blood vessels, as well as numbness in the hands and feet. Acute arsenic poisoning has caused nausea, vomiting, and diarrhea in workers. Dermatitis has also been reported in workers exposed to arsenic. Inhalation exposure to arsenic causes an increased risk of lung cancer.

31. Cobalt is a possible human carcinogen. Chronic exposure to cobalt on the human respiratory system causes respiratory irritation, diminished pulmonary function, wheezing, asthma, pneumonia, and fibrosis. Occupational exposure to cobalt causes cardiomyopathy. Dermal exposure to cobalt causes dermatitis.

32. In 1989, Dames & Moore conducted a Preliminary Site Characterization Report for the Site on behalf of Anschutz. On March 25, 2003, Anschutz and NL entered into an Administrative Order for Compliance on Consent with EPA to complete a Removal Site Investigation Report for lead characterization along Tollar Branch and Saline Creek in populated areas that may have been affected by the 1977 dam failure. On May 27, 2004, Anschutz and NL submitted a Removal Site Investigation Report; however, negotiations stalled shortly thereafter. In April 2011, EPA completed a Draft Supplemental Remedial Investigation Report for the Madison County Mines Superfund Site. On June 2, 2016, EPA sent a Special Notice Letter to Anschutz and NL inviting the parties to participate in negotiations to reach a settlement to conduct or finance a Remedial Investigation/Feasibility Study. Negotiations, however, were again unsuccessful.

33. Respondent intends to recycle existing tailings on the Site into a useful product, ensuring all proper solid and hazardous waste management practices are followed, as part of Respondent's new business operations.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

34. Based on the Findings of Fact set forth above, and the administrative record, EPA has determined that:

a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). Respondent is the "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

e. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22), and may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

f. The removal action required by this Settlement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

35. Based upon the Findings of Fact, Conclusions of Law, and Determinations set forth above, and the administrative record, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND REMEDIAL PROJECT MANAGER

36. Respondent shall retain one or more contractors or subcontractors to perform the Work and shall notify EPA of the names, titles, addresses, telephone numbers, email addresses, and qualifications of such contractors or subcontractors within thirty (30) days after the Effective Date. Respondent shall also notify EPA of the names, titles, contact information, and qualifications of any other contractors or subcontractors retained to perform the Work at least thirty (30) days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves

of a selected contractor or subcontractor, Respondent shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications within thirty (30) days after EPA's disapproval. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

37. Respondent has designated, and EPA has not disapproved, the following individual as Project Coordinator, who shall be responsible for administration of all actions by Respondent required by this Settlement:

Eric Page, R.G., P.G.
Environmental Operations, Inc.
1530 South Second Street
St. Louis, Missouri 63104
(314) 241-0900
eric@environmentalops.com

a. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of the designated Project Coordinator who does not meet the requirements of Paragraph 36. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within thirty (30) days following EPA's disapproval. Notice or communication relating to this Settlement from EPA to Respondent's Project Coordinator shall constitute notice or communication to Respondent.

38. EPA has designated Kurt Limesand of the Lead Mining and Special Emphasis Branch of the Superfund Division of EPA, Region 7, as its Remedial Project Manager ("RPM"). EPA and Respondent shall have the right, subject to Paragraph 37, to change their respective designated RPM or Project Coordinator. Respondent shall notify EPA at least thirty (30) days before such a change is made. The initial notification by Respondent may be made orally, but shall be promptly followed by a written notice.

39. The RPM shall be responsible for overseeing Respondent's implementation of this Settlement. The RPM shall have the authority vested in an OSC or RPM by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement, or to direct any other removal action undertaken at the Site. Absence of the RPM from the Site shall not be cause for stoppage of work unless specifically directed by the RPM.

VIII. WORK TO BE PERFORMED

40. Respondent shall perform, at a minimum, all actions necessary to implement the SOW, attached as Appendix 3, the Supplemental Investigation Work Plan, attached as Appendix 4, the Preliminary Early Removal Action Work Plan, attached as Appendix 5, and all other requirements of this Settlement.

41. For any regulation or guidance referenced in the Settlement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

42. **Supplemental Investigation Work Plan and Report**

a. Within thirty (30) days of the Effective Date of this Settlement, Respondent shall implement the Supplemental Investigation Work Plan, attached as Appendix 4.

b. Unless extended by EPA in its sole discretion, Respondent shall submit for EPA review and approval a draft Supplemental Investigation Report no later than six (6) months from the effective date of this Settlement, and within 30 days of receipt of the complete laboratory analytical data required by the Supplemental Investigation Work Plan, in accordance with the SOW and Paragraph 45 (Submission of Deliverables). The draft Supplemental Investigation Report shall include a description of field activities during the site investigation, results of all field and analytical testing generated on behalf of Respondent, and conclusions and recommendations for any additional testing necessary to support preparation of a detailed RADIWP.

43. **Removal Action Design and Implementation Work Plan**

a. Within thirty (30) days of EPA approval of the Supplemental Investigation Report, in accordance with the SOW and Paragraph 45 (Submission of Deliverables), Respondent shall submit to EPA for review and approval a Removal Action Design and Implementation Work Plan for performing the removal action generally described in the SOW. The RADIWP shall provide a description of, and an expeditious schedule for, the actions required by this Settlement.

44. EPA may approve, disapprove, require revisions to, or modify the deliverables required under this Settlement, in whole or in part. If EPA requires revisions, Respondent shall submit a revised draft report or work plan within thirty (30) days of receipt of EPA's notification of the required revisions. For any work plan required under this Settlement, Respondent shall implement the work plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the work plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement.

a. Upon approval or approval with modifications of any work plan required under this Settlement, Respondent shall commence implementation of the Work in accordance with the schedule included therein. Respondent shall not commence or perform any Work except in conformance with the terms of this Settlement.

b. Unless otherwise provided in this Settlement, any additional deliverables that require EPA approval under the SOW shall be reviewed and approved by EPA in accordance with this Paragraph.

45. **Submission of Deliverables**

a. **General Requirements for Deliverables**

(1) Except as otherwise provided in this Settlement, Respondent shall direct all submissions required by this Settlement to Kurt Limesand, RPM, at EPA Region 7, 11201 Renner Boulevard, Lenexa, Kansas 66219, and by email to *limesand.kurt@epa.gov*. All submissions required by this Settlement to be sent to the Missouri Department of Natural Resources shall be sent to Christopher Dudenhoeffer at Remedial Project Management Unit, Superfund Section, Hazardous Waste Program, Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, Missouri 65102, or by email to *christopher.duddenhoeffer@dnr.mo.gov*. Respondent shall submit all deliverables required by this Settlement, including the attached SOW and any approved work plans, to EPA in accordance with the schedule set forth in such plan.

(2) Respondent shall submit all deliverables in the format specified in the SOW, attached as Appendix 3. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 45.b. All other deliverables shall be submitted to EPA in the form specified by the RPM. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5 x 11 inches, Respondent shall also provide EPA with paper copies of such exhibits.

b. **Technical Specifications for Deliverables**

(1) Sampling and monitoring data should be submitted in standard Regional Electronic Data Deliverable (EDD) format or as directed by EPA's RPM. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

(2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (a) in the ESRI File Geodatabase format; and (b) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at https://www.epa.gov/geospatial/epa-metadata-editor.

(3) Each file must include an attribute name for each site unit or sub-unit submitted. Consult https://www.epa.gov/geospatial/geospatial-policies-and-standards for any further available guidance on attribute identification and naming.

(4) Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Site.

46. **Health and Safety Plan.** Respondent shall implement a Health and Safety Plan ("HASP"), which is included in Respondent's Preliminary Early Removal Action Work Plan, attached as Appendix 4, to ensure the protection of the public health and safety during performance of on-site work under this Settlement. Respondent certifies that this plan was prepared in accordance with "OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities," Pub. 9285.0-OlC (Nov. 2002), available on the NSCEP database at https://www.epa.gov/nscep, and "EPA's Emergency Responder Health and Safety Manual," OSWER Directive 9285.3-12 (July 2005 and updates), available at https://www.epaosc.org/_HealthSafetyManual/manual-index.htm. In addition, Respondent certifies that the plan complies with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also be revised to include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.

47. **Quality Assurance, Sampling, and Data Analysis**

a. Respondent shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" EPA/240/B-01/003 (March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)" EPA/240/R-02/009 (December 2002), and "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A-900C (March 2005).

b. Within thirty (30) days after the Effective Date, Respondents shall implement the Supplemental Investigation Work Plan, attached to this settlement as Appendix 4, and which consists of a field sampling plan and a Quality Assurance Project Plan (QAPP). Respondent certifies that the Supplemental Investigation Work Plan is consistent with the SOW, the NCP, and EPA guidance, including, but not limited to, "Guidance for Quality Assurance Project Plans (QA/G-5)" EPA/240/R-02/009 (December 2002), "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" EPA 240/B-01/003 (March 2001, reissued May 2006), and "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A-900C (March 2005). The Supplemental Investigation Work Plan is incorporated into and enforceable under this Settlement.

c. Respondent shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondent in implementing this Settlement. In addition, Respondent shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance, quality

control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with the Agency's "EPA QA Field Activities Procedure," CIO 2105-P-02.1 (9/23/2014) available at http://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures. Respondent shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions" available at http://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements and that the laboratories perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (http://www.epa.gov/clp), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (https://www.epa.gov/hw-sw846), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org), 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (http://www3.epa.gov/ttnamti1/airtox.html).

d. However, upon approval by EPA, Respondent may use other appropriate analytical method(s), as long as (i) quality assurance/quality control (QA/QC) criteria are contained in the method(s) and the method(s) are included in the QAPP, (ii) the analytical method(s) are at least as stringent as the methods listed above, and (iii) the method(s) have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc. Respondent shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Settlement have a documented Quality System that complies with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs - Requirements with guidance for use" (American Society for Quality, February 2014), and "EPA Requirements for Quality Management Plans (QA/R-2)" EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network (ERLN) laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements. Respondent shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

e. Upon EPA's request, Respondent shall provide split or duplicate samples to EPA or its authorized representatives. Respondent shall notify EPA not less than seven (7) days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall provide to Respondent split or duplicate samples of any samples that it takes as part of EPA's oversight of Respondent's implementation of the Work.

f. Respondent shall submit to EPA the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondent with respect to the Site and/or the implementation of this Settlement.

g. Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State, or Respondent in the performance or oversight of the Work that has been verified according to the QA/QC procedures required by the Settlement or any EPA-approved Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the Work, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within fifteen (15) days after the monthly progress report containing the data.

48. **Final Report**. Within sixty (60) days after completion of the RADIWP and all other Work required by this Settlement other than continuing obligations listed in Section XXVIII (Notice of Completion of Work), Respondent shall submit for EPA review and approval a final report, called a Removal Action Report, summarizing the actions taken to comply with this Settlement. The Removal Action Report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "RPM Reports," and the SOW. The Removal Action Report shall include all of the requirements outlined in Section VI of the SOW, attached as Appendix 3 to this Settlement.

49. **Post-Removal Site Control**. In accordance with the SOW, or as otherwise directed by EPA, Respondent shall submit a Post-Removal Site Control Plan within sixty (60) days after the completion of the Removal Action Report. The plan shall include, but not be limited to, long-term operations and maintenance of the capped areas, retention basins, and other necessary permanent features of the removal action to ensure the long-term effectiveness and integrity of the removal action as constructed by Respondent, and shall provide a schedule for the implementation of repair and maintenance work at the Site. Upon EPA approval, Respondent shall either conduct Post-Removal Site Control activities, or obtain a written commitment from another party for the conducting of such activities, until such time as EPA determines that no further Post-Removal Site Control is necessary. Respondent shall provide EPA with documentation of all Post-Removal Site Control commitments.

50. **Progress Reports**. In accordance with the SOW, Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Settlement on a monthly basis, or as otherwise requested by EPA, by the 28th day of every month after the Effective Date of this Settlement, until issuance of Notice of Completion of Work pursuant to Section XXVIII, unless otherwise directed in writing by the RPM.

51. **Off-Site Shipments**

a. Respondent may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with CERCLA Section 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).

b. Respondent may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate

state environmental official in the receiving facility's state and to the RPM. This written notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent also shall notify the state environmental official referenced above and the RPM of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for the removal action and before the Waste Material is shipped.

c. Respondent may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

IX. PROPERTY REQUIREMENTS

52. **Agreements Regarding Access and Non-Interference.** Respondent shall, with respect to any Non-Settling Owner's Affected Property, use best efforts to secure from such Non-Settling Owner an agreement, enforceable by Respondent and EPA, providing that such Non-Settling Owner, and Respondent shall, with respect to Respondent's Affected Property: (i) provide EPA, Respondent, and their representatives, contractors, and subcontractors with access at all reasonable times to such Affected Property to conduct any activity regarding the Settlement, including those activities listed in Paragraph 52.a (Access Requirements); and (ii) refrain from using such Affected Property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or interfere with or adversely affect the implementation, integrity, or protectiveness of the removal action. Respondent shall provide a copy of such access agreement(s) to EPA.

a. **Access Requirements**. The following is a list of activities for which access is required regarding the Affected Property:

(1) Monitoring the Work;

(2) Verifying any data or information submitted to the United States;

(3) Conducting investigations regarding contamination at or near the Site;

(4) Obtaining samples;

(5) Assessing the need for, planning, implementing, or monitoring response actions;

(6) Assessing implementation of quality assurance and quality control practices as defined in the approved quality assurance quality control plan as provided in the SOW;

(7) Implementing the Work pursuant to the conditions set forth in Paragraph 95 (Work Takeover);

(8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section X (Access to Information);

(9) Assessing Respondent's compliance with the Settlement;

(10) Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Settlement; and

(11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Affected Property.

53. **Best Efforts**. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If Respondent is unable to accomplish what is required through "best efforts" in a timely manner, Respondent shall notify EPA, and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access and/or use restrictions. All costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time and the amount of monetary consideration or just compensation paid, constitute Future Response Costs to be reimbursed under Section XIV (Payment of Response Costs).

54. If EPA determines in a decision document prepared in accordance with the NCP that institutional controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices are needed, Respondent shall cooperate with EPA's efforts to secure and ensure compliance with such institutional controls.

55. In the event of any Transfer of the Affected Property, unless EPA otherwise consents in writing, Respondent shall continue to comply with its obligations under the Settlement, including its obligation to secure access and ensure compliance with any land, water, or other resource use restrictions regarding the Affected Property.

56. **Notice to Successors-in-Title.** Respondent shall, prior to entering into a contract to Transfer its Affected Property, or sixty (60) days prior to Transferring its Affected Property, whichever is earlier:

a. Notify the proposed transferee that EPA has selected a removal action regarding the Site, that potentially responsible parties have entered into an Administrative Settlement Agreement and Order on Consent requiring implementation of such removal action, (identifying the name, docket number, and the effective date of this Settlement); and

b. Notify EPA of the name and address of the proposed transferee and provide EPA with a copy of the above notice that it provided to the proposed transferee.

57. Notwithstanding any provision of the Settlement, EPA retains all of its access authorities and rights, as well as all of its rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

X. ACCESS TO INFORMATION

58. Respondent shall provide to EPA, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Respondent's possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

59. **Privileged and Protected Claims**

a. Respondent may assert all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondent complies with Paragraph 59.b, and except as provided in Paragraph 59.c.

b. If Respondent asserts such a privilege or protection, they shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that they claim to be privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent's favor.

c. Respondent may make no claim of privilege or protection regarding: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondent is required to create or generate pursuant to this Settlement.

60. **Business Confidential Claims**. Respondent may assert that all or part of a Record provided to EPA under this Section or Section XI (Record Retention) is business confidential to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondent shall segregate and clearly identify all Records or parts thereof submitted under this Settlement for which Respondent asserts business confidentiality claims. Records that Respondent claims to be confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA, or if EPA has notified Respondent that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondent.

61. Notwithstanding any provision of this Settlement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XI. RECORD RETENTION

62. Until ten (10) years after EPA provides Respondent with notice, pursuant to Section XXVIII (Notice of Completion of Work), that all Work has been fully performed in accordance with this Settlement, Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its liability under CERCLA with regard to the Site, provided, however, that if Respondent is potentially liable as an owner or operator of the Site, Respondent must retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above, all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in Respondent's possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

63. At the conclusion of the document retention period, Respondent shall notify EPA at least ninety (90) days prior to the destruction of any such Records, and, upon request by EPA, and except as provided in Paragraph 59 (Privileged and Protected Claims), Respondent shall deliver any such Records to EPA.

64. Respondent certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the State and that it has fully complied with any and all EPA and State requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and state law.

XII. COMPLIANCE WITH OTHER LAWS

65. Nothing in this Settlement limits Respondent's obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Settlement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws.

66. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondent may seek relief under the provisions of Section XVI (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that Respondent has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals. This Settlement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

67. **Emergency Response**. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondent shall take these actions in accordance with all applicable provisions of this Settlement, including, but not limited to, the Health and Safety Plan. Respondent shall also immediately notify the RPM or, in the event of his/her unavailability, the Regional Duty Officer at (913) 281-0991 of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA for all costs of such response action not inconsistent with the NCP pursuant to Section XIV (Payment of Response Costs).

68. **Release Reporting**. Upon the occurrence of any event during performance of the Work that Respondent is required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, Respondent shall immediately orally notify the RPM or, in the event of his/her unavailability, the Regional Duty Officer at (913) 281-0991, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

69. For any event covered under this Section, Respondent shall submit a written report to EPA within seven (7) days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

XIV. PAYMENT OF RESPONSE COSTS

70. **Payments for Future Response Costs**

a. Respondent shall pay all Future Response Costs not inconsistent with the NCP.

b. **Periodic Bills.** On a periodic basis, EPA will send Respondent a bill requiring payment that includes an Itemized Cost Summary, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondent shall make all payments within thirty (30) days after Respondent's receipt of each bill requiring payment, except as otherwise provided in Paragraph 72 (Contesting Future Response Costs). Respondent shall make payment to EPA by one of the methods listed below:

(1) By Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York, NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number 07LT and the EPA docket number for this action.

(2) By Automated Clearinghouse (ACH) to:

500 Rivertech Court
Riverdale, Maryland 20737
Contact – John Schmid 202-874-7026 or REX, 1-866-234-5681
ABA = 051036706
Transaction Code 22 - checking
Environmental Protection Agency
Account 310006
CTX Format

and shall reference Site/Spill ID Number 07LT and the EPA docket number for this action.

(3) By online payment at https://www.pay.gov to the U.S. EPA account in accordance with instructions to be provided to Respondent by EPA.

(4) By official bank check made payable to "EPA Hazardous Substance Superfund." Each check, or a letter accompanying each check, shall identify the name and address of the party making payment, the Site name, Site/Spill ID Number 07LT, and the EPA docket number for this action, and shall be sent to:

US Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, MO 63197-9000

c. At the time of payment, Respondent shall send notice that payment has been made to Kurt Limesand, RPM, EPA Region 7, by email at *limesand.kurt@epa.gov* or by mail to 11201 Renner Boulevard, Lenexa, Kansas 66219, and to the EPA Cincinnati Finance Office by email at *cinwd_acctsreceivable@epa.gov*, or by mail to:

EPA Cincinnati Finance Office
26 W. Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number 07LT and the EPA docket number for this action.

d. **Deposit of Future Response Costs Payments**. The total amount to be paid by Respondent pursuant to Paragraph 70.b (Periodic Bills) shall be deposited by EPA in the Madison County Mines Superfund Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the Madison County Mines Superfund Site Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum.

71. **Interest**. In the event that any payment for Future Response Costs is not made by the date required, Respondent shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of Respondent's payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVII (Stipulated Penalties).

72. **Contesting Future Response Costs**. Respondent may initiate the procedures of Section XV (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 70.a (Payments for Future Response Costs) if they determine that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate such dispute, Respondent shall submit a Notice of Dispute in writing to the RPM within thirty (30) days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondent submits a Notice of Dispute, Respondent shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 70, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC) and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the RPM a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within five (5) days after the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 70. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 70. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XV. DISPUTE RESOLUTION

73. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement. The Parties shall attempt to resolve any disagreements concerning this Settlement expeditiously and informally.

74. **Informal Dispute Resolution**. If Respondent objects to any EPA action taken pursuant to this Settlement, including billings for Future Response Costs, they shall send EPA a written Notice of Dispute describing the objection(s) within thirty (30) days after such action. EPA and Respondent shall have ninety (90) days from EPA's receipt of Respondent's Notice of Dispute to resolve the dispute through informal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

75. **Formal Dispute Resolution**. If the Parties are unable to reach an agreement within the Negotiation Period, Respondent shall, within twenty (20) days after the end of the Negotiation Period, submit a statement of position to the RPM. EPA may, within twenty (20)

days thereafter, submit a statement of position. Thereafter, an EPA management official at the Director of EPA Region 7's Superfund Division level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement. Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

76. Except as provided in Paragraph 72 (Contesting Future Response Costs) or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondent under this Settlement. Except as provided in Paragraph 85, stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement. In the event that Respondent does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XVII (Stipulated Penalties).

XVI. FORCE MAJEURE

77. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors that delays or prevents the performance of any obligation under this Settlement despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercises "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work, or increased cost of performance.

78. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement for which Respondent intends or may intend to assert a claim of force majeure, Respondent shall notify EPA's RPM orally or, in his or her absence, the alternate EPA RPM, or, in the event both of EPA's designated representatives are unavailable, the Director of the Superfund Division, EPA Region 7, within seven (7) days of when Respondent first knew that the event might cause a delay. Within seven (7) days thereafter, Respondent shall provide in writing to 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's rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondent shall include with any notice all available documentation supporting its 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 EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a

force majeure under Paragraph 77 and whether Respondent has exercised its best efforts under Paragraph 77, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

79. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, the time for performance of the obligations under this Settlement that are affected by the force majeure will be extended by 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 shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure.

80. If Respondent elects to invoke the dispute resolution procedures set forth in Section XV (Dispute Resolution), it shall do so no later than fifteen (15) days after receipt of 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, 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 77 and 78. 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 Settlement identified to EPA.

81. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondent from meeting one or more deadlines under the Settlement, Respondent may seek relief under this Section.

XVII. STIPULATED PENALTIES

82. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 83.a for failure to comply with the obligations specified in Paragraphs 83.b, unless excused under Section XVI (Force Majeure). "Comply" as used in the previous sentence include compliance by Respondent with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

83. **Stipulated Penalty Amounts - Payments, Financial Assurance, Major Deliverables, and Other Milestones and Deliverables**

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 83.b:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1,000	15th through 30th day
$2,000	31st day and beyond

b. **Obligations**

(1) Perform any Work required by this Settlement;

(2) Designation of Project Coordinator (Section VII);

(3) Establishment and maintenance of financial assurance in accordance with Section XXV (Financial Assurance);

(4) Submission of Progress Reports (Paragraph 50);

(5) Establishment of an escrow account to hold any disputed Future Response Costs under Paragraph 72 (Contesting Future Response Costs);

(6) Emergency response/release reporting (Section XIII); and

(7) Any other requirement established by this Settlement in a timely or adequate manner.

84. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 95 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of $250,000. Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 95 (Work Takeover) and 116 (Access to Financial Assurance).

85. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within fifteen (15) days after the agreement or the receipt of EPA's decision or order. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (b) with respect to a decision by a EPA management official at the Director of the Superfund Division, EPA Region 7, level or higher, under Paragraph 75 (Formal Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.

86. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement, EPA may give Respondent written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.

87. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days after Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the Dispute Resolution procedures under Section XV (Dispute

Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 70 (Payments for Future Response Costs).

88. If Respondent fails to pay stipulated penalties when due, Respondent shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondent has timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 85 until the date of payment; and (b) if Respondent fails to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 87 until the date of payment. If Respondent fails to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.

89. The payment of penalties and Interest, if any, shall not alter in any way Respondent's obligation to complete the performance of the Work required under this Settlement.

90. Nothing in this Settlement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(*l*) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided however, that EPA shall not seek civil penalties pursuant to Section 106(b) or Section 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement, except in the case of a willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 95 (Work Takeover).

91. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

XVIII. COVENANTS BY EPA

92. Except as provided in Section XIX (Reservations of Rights by EPA), EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement. These covenants extend only to Respondent and do not extend to any other person.

XIX. RESERVATIONS OF RIGHTS BY EPA

93. Except as specifically provided in this Settlement, nothing in this Settlement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, 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 on, at, or from the Site. Further, nothing in this Settlement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

94. The covenants set forth in Section XVIII (Covenants by EPA) do not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

a. liability for failure by Respondent to meet a requirement of this Settlement;

b. liability for costs not included within the definition of Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;

e. liability for violations of federal or state law that occur during or after implementation of the Work;

f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement.

95. **Work Takeover**

a. In the event EPA determines that Respondent: (1) has ceased implementation of any portion of the Work; (2) is seriously or repeatedly deficient or late in its performance of the Work; or (3) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondent. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondent a period of three (3) days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

b. If, after expiration of the three-day notice period specified in Paragraph 95.a, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume

the performance of all or any portion(s) of the Work as EPA deems necessary ("Work Takeover"). EPA will notify Respondent in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 95.b. Funding of Work Takeover costs is addressed under Paragraph 116 (Access to Financial Assurance).

c. Respondent may invoke the procedures set forth in Paragraph 75 (Formal Dispute Resolution) to dispute EPA's implementation of a Work Takeover under Paragraph 95.b. However, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 95.b until the earlier of (1) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a written decision terminating such Work Takeover is rendered in accordance with Paragraph 75 (Formal Dispute Resolution).

d. Notwithstanding any other provision of this Settlement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XX. COVENANTS BY RESPONDENT

96. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, and this Settlement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund through Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding the Work, Future Response Costs, and this Settlement; or

c. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law.

97. Except as provided in Paragraph 100 (Waiver of Claims by Respondent), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to any of the reservations set forth in Section XIX (Reservations of Rights by EPA), other than in Paragraph 94.a (liability for failure to meet a requirement of the Settlement), 94.d (criminal liability), or 94.e (violations of federal/state law during or after implementation of the Work), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

98. Nothing in this Settlement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

99. Respondent reserves, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondent's deliverables or activities.

100. **Waiver of Claims by Respondent**

a. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that they may have:

(1) ***De Micromis* Waiver**. For all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials; and

(2) ***De Minimis*/Ability to Pay Waiver.** For response costs relating to the Site against any person that has entered or in the future enters into a final Section 122(g) *de minimis* settlement, or a final settlement based on limited ability to pay, with EPA with respect to the Site.

b. **Exceptions to Waivers**

(1) The waivers under this Paragraph 100 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person otherwise covered by such waivers if such person asserts a claim or cause of action relating to the Site against Respondent.

(2) The waiver under Paragraph 100.a(1) (*De Micromis* Waiver) shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative

subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise.

XXI. OTHER CLAIMS

101. By issuance of this Settlement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement.

102. Except as expressly provided in Paragraphs 100 (Waiver of Claims by Respondent) and Section XVIII (Covenants by EPA), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

103. No action or decision by EPA pursuant to this Settlement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXII. EFFECT OF SETTLEMENT/CONTRIBUTION

104. Except as provided in Paragraphs 100 (Waiver of Claims by Respondent), nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XX (Covenants by Respondent), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

105. The Parties agree that this Settlement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement. The "matters addressed" in this Settlement are the Work and Future Response Costs.

106. The Parties further agree that this Settlement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

107. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA in writing no later than sixty (60) days prior to the initiation of such suit or claim. Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA in writing within ten (10) days after service of the complaint or claim upon it. In addition, Respondent shall notify EPA within ten (10) days after service or receipt of any Motion for Summary Judgment and within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

108. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XVIII (Covenants by EPA).

XXIII. INDEMNIFICATION

109. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondent as EPA's authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. 300.400(d)(3). Respondent shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondent's behalf or under its control, in carrying out activities pursuant to this Settlement. Further, Respondent agrees to pay the United States all costs it incurs, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

110. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

111. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXIV. INSURANCE

112. No later than three (3) days before commencing any on-site Work, Respondent shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section XXVIII (Notice of Completion of Work), commercial general liability insurance with limits of liability of $1 million per occurrence, automobile liability insurance with limits of liability of $1 million per accident, and umbrella liability insurance with limits of liability of $5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondent pursuant to this Settlement. In addition, for the duration of the Settlement, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, Respondent need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondent shall ensure that all submittals to EPA under this Paragraph identify the Site as the "MMI Site, part of OU2 of the Madison County Mines Superfund Site" in Madison County, Missouri, and the EPA docket number for this action, CERCLA-07-2018-0296.

XXV. FINANCIAL ASSURANCE

113. In order to ensure completion of the Work, Respondent shall secure financial assurance, initially in the amount of $10,900,000, for the benefit of EPA.

114. Respondent has selected, and EPA has found satisfactory, a Remedial Funds Escrow Agreement as financial assurance, dated the same date as the Effective Date of this Order and attached as Appendix 6.

115. Respondent shall diligently monitor the adequacy of the financial assurance. If Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section,

Respondent shall notify EPA of such information within seven (7) days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify Respondent of such determination. Respondent shall, within thirty (30) days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism. EPA may extend this deadline for such time as is reasonably necessary for Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed sixty (60) days. Respondent shall follow the procedures of Paragraph 117 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Settlement.

116. **Access to Financial Assurance**

a. If EPA issues a notice of implementation of a Work Takeover under Paragraph 95.b, then, in accordance with any applicable financial assurance mechanism, EPA is entitled to: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid in accordance with Paragraph 116.d.

b. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel the mechanism, and Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least thirty (30) days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with Paragraph 116.d.

c. If, upon issuance of a notice of implementation of a Work Takeover under Paragraph 95.b, EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism, whether in cash or in kind, to continue and complete the Work, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondent shall, within thirty (30) days of such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph 116 shall be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA may deposit the payment into the EPA Hazardous Substance Superfund or into the Madison County Mines Superfund Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

e. All EPA Work Takeover costs not paid under this Paragraph 116 must be reimbursed as Future Response Costs under Section XIV (Payment of Response Costs).

117. **Modification of Amount, Form, or Terms of Financial Assurance**. Respondent may submit, on any anniversary of the Effective Date or at any other time agreed to by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to Alan Cooke, Regional Financial Management Officer, EPA Region 7, at 11201 Renner Boulevard, Lenexa, Kansas 66219, or *cooke.alan@epa.gov*, and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondent of its decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Respondent may reduce the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) if there is a dispute, the agreement or written decision resolving such dispute under Section XV (Dispute Resolution). Respondent may change the form or terms of the financial assurance mechanism only in accordance with EPA's approval. Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum. Within thirty (30) days after receipt of EPA's approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Respondent shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to EPA pursuant to Paragraph 45.

118. **Release, Cancellation, or Discontinuation of Financial Assurance**. Respondent may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Section XXVIII (Notice of Completion of Work), except that an appropriate amount of financial assurance for Post-Removal Site Controls, as determined by EPA, shall be preserved; (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation, or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XV (Dispute Resolution).

XXVI. MODIFICATION

119. The RPM may modify any plan, schedule, or the SOW in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the RPM's oral direction. Any other requirements of this Settlement may be modified in writing by mutual agreement of the parties.

120. If Respondent seeks permission to deviate from any approved work plan, schedule, or the SOW, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the RPM pursuant to Paragraph 119.

121. No informal advice, guidance, suggestion, or comment by the RPM or other EPA representatives regarding any deliverable submitted by Respondent shall relieve Respondent of

its obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

XXVII. ADDITIONAL REMOVAL ACTION

122. If EPA determines that additional removal actions not included in any approved plans are necessary to protect public health, welfare, or the environment, and such additional removal actions are consistent with the SOW, EPA will notify Respondent of that determination. Unless otherwise stated by EPA, within thirty (30) days after receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Respondent shall submit for approval by EPA a work plan for the additional removal actions. The plan shall conform to the applicable requirements of Section VIII (Work to Be Performed) of this Settlement. Upon EPA's approval of the plan pursuant to Section VIII, Respondent shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. This Section does not alter or diminish the RPM's authority to make oral modifications to any plan or schedule pursuant to Section XXVI (Modification).

XXVIII. NOTICE OF COMPLETION OF WORK

123. When EPA determines, after EPA's review of the Final Report, that the Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement including Post-Removal Site Controls and record retention, EPA will provide written notice to Respondent. If EPA determines that such Work has not been completed in accordance with this Settlement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the RADIWP if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved RADIWP and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified RADIWP shall be a violation of this Settlement.

XXIX. INTEGRATION/APPENDICES

124. This Settlement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement. The following appendices are attached to and incorporated into this Settlement:

Appendix 1 – General Site Map
Appendix 2 – Detailed Site Map
Appendix 3 – Statement of Work
Appendix 4 – Supplemental Investigation Work Plan
Appendix 5 – Preliminary Early Removal Action Work Plan
Appendix 6 – Remedial Funds Escrow Agreement

XXX. EFFECTIVE DATE

125. This Settlement shall be effective upon signature by the Director of the Superfund Division, EPA Region 7.

126. Respondent's obligation to perform the Work will begin on the Effective Date of this Settlement.

IT IS SO AGREED AND ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY:

2/28/2019
Dated

Mary P. Peterson
Mary P. Peterson
Director, Superfund Division
EPA Region 7

Signature Page for Settlement Regarding OU2 of the Madison County Mines Superfund Site

FOR RESPONDENT MISSOURI MINING INVESTMENTS, LLC:

2/28/19
Dated

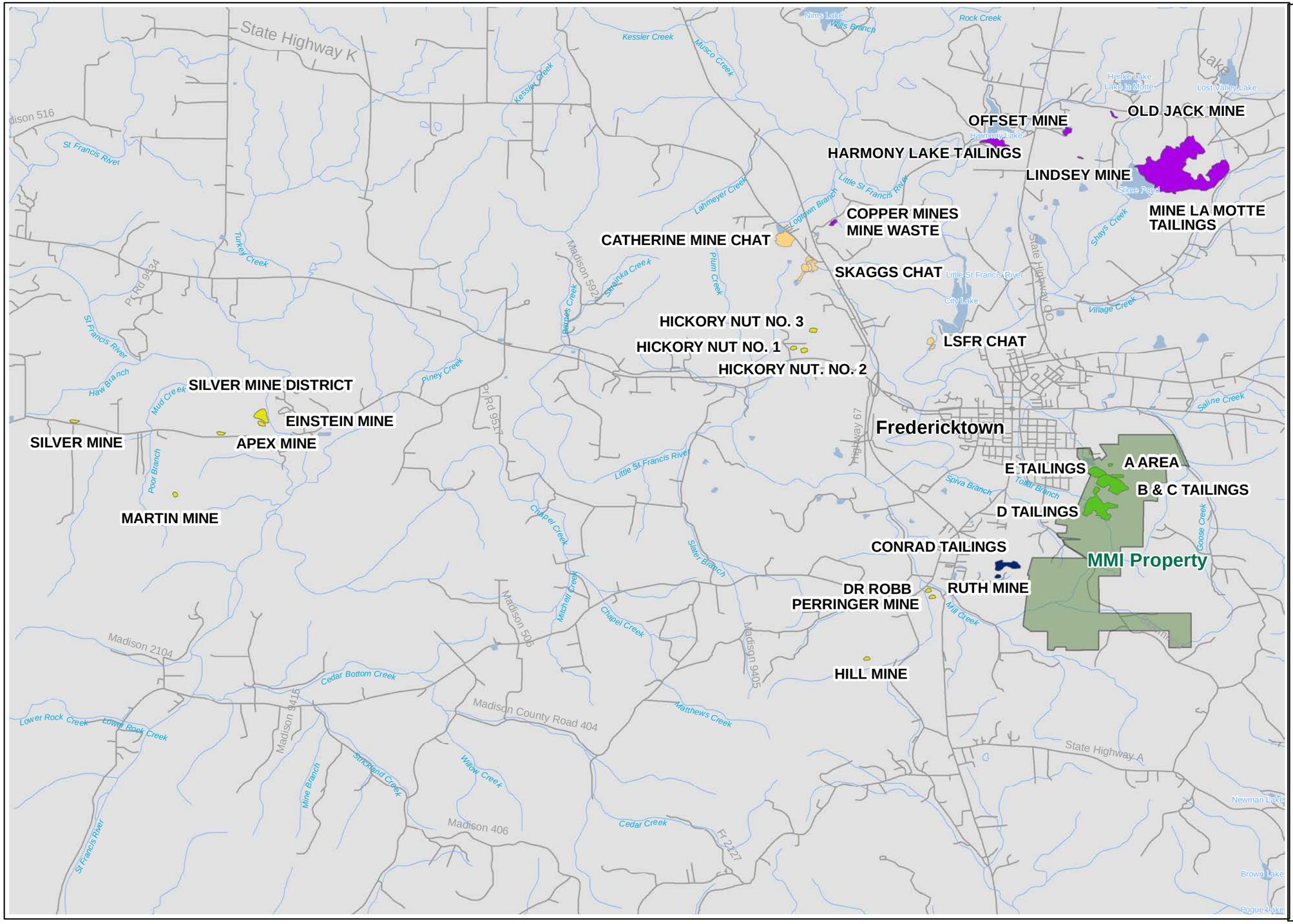
Signature

John J Diehl, Sr
Printed Name

Secretary / Vice-President
Title

Appendix 1:

General Site Map



APPENDIX 1
MADISON COUNTY
MINES
SUPERFUND SITE
Tailings/Chat Piles &
MMI Property

Legend

- MMI Portion of OU2
- Tailings Piles OU1
- Tailings Piles OU2
- Tailings Piles OU4
- Tailings Piles OU5
- Tailings Piles OU6
- streets
- streams
- lakes

LSFR - Little St. Francis River

N

0 3,750 7,500 15,000

Feet

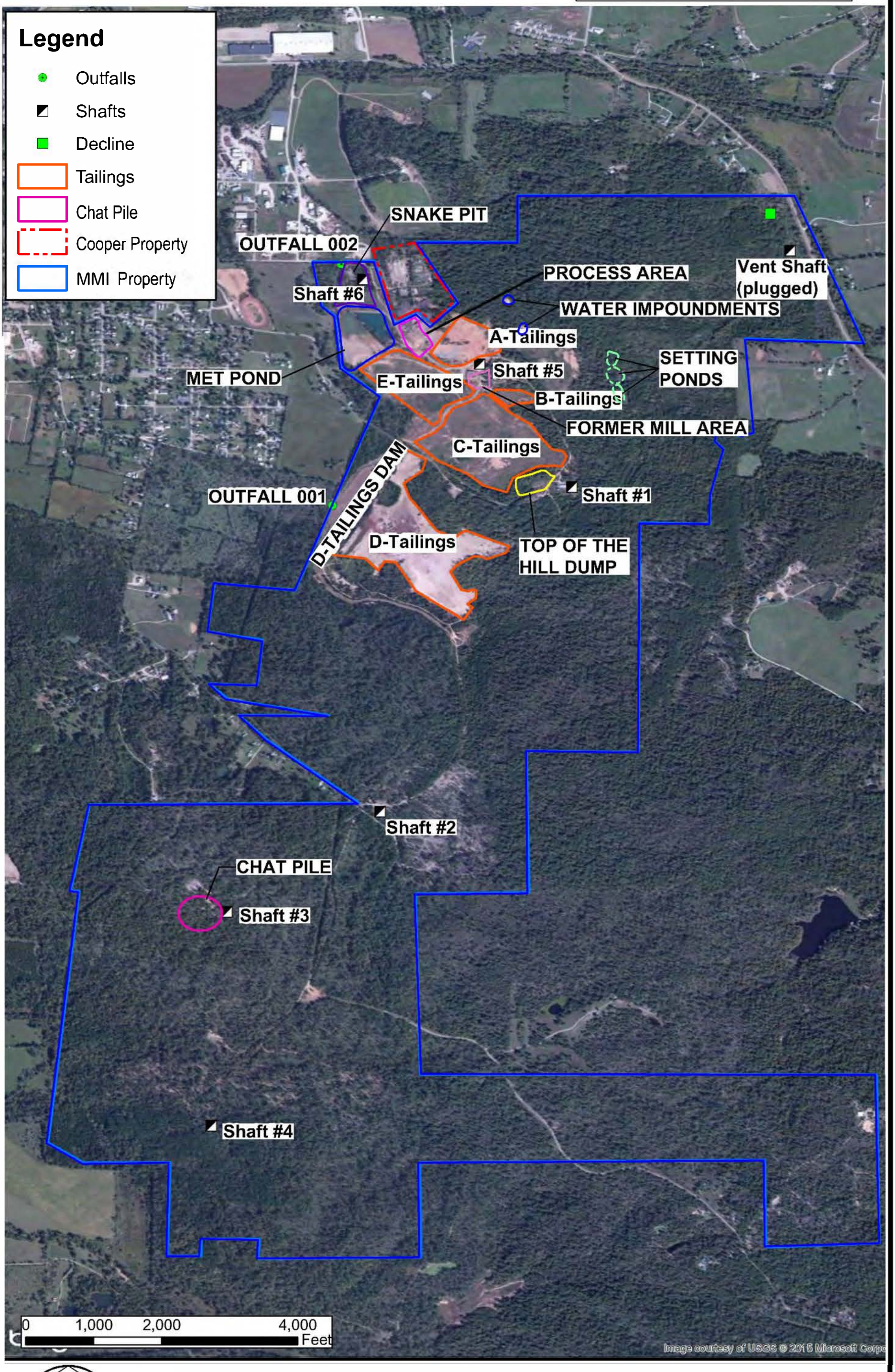
FREDERICKTOWN, MISSOURI

Original: April 9, 2009
Modified by US EPA:
December 13, 2018
OU3 and OU7 not shown

Appendix 2:

Detailed Site Map

Environmental Operations, Inc.



North

Detailed Site Map

Madison Mine
Fredricktown, Missouri
Modified from Original by US EPA Feb. 12, 2019

Appendix 3:

Statement of Work

APPENDIX 3

Statement of Work for the
Missouri Mining Investments Property Portion of Operable Unit 2
Anschutz Mine Site
Madison County Mines Superfund Site
Madison County, Missouri
TIME-CRITICAL REMOVAL ACTION

I. *Purpose*

This Removal Action Statement of Work (SOW) sets forth removal action requirements for the Site, which is the portion of Operable Unit 2 of the Madison County Mines Superfund Site comprised of approximately 1,750 acres of property that Respondent purchased from the Anschutz Mining Corporation, located in northeastern Madison County near the city of Fredericktown, Missouri. The Site includes but is not limited to the A, B, C, D, and E Tailings Piles, various historic mine shafts, the metallurgical pond, the D Tailings Pile Dam, chat piles, the mine dump, the mine decline, the processing area, and impacts from those areas within the boundaries of the approximately 1,750-acre area shown in Appendix 2 of the Administrative Settlement Agreement and Order on Consent for Removal Actions, or AOC. The Site does not include the approximately 15.14-acre property known as the Cooper Property, which includes a former metals refinery and associated waste on that property, or other impacts outside the boundaries of the 1,750-acre area shown in Appendix 2 of the AOC. This SOW is an appendix to and is incorporated as part of the AOC entered into by Missouri Mining Investments (Respondent) and EPA, Docket No. CERCLA-07-2018-0296.

The Respondent shall conduct a removal action on the Site to stabilize erosion, reduce wind-blown mine tailings, and reduce the potential for exposure to hazardous substances which are present at the Site and which present a threat to human health and the environment. Hazardous substances present at the Site include lead and other metals which are contained in material deposited at the Site during the historic mining and processing of metallic mineral ores. The removal action shall comply with and be conducted in accordance with the Preliminary Early Removal Action Work Plan prepared by Environmental Operations Inc. on behalf of Respondent, dated October 22, 2018, and attached as Appendix 5 to the AOC, and the Removal Action Design and Implementation Work Plan (RADIWP) to be approved by EPA in accordance with the AOC and this SOW.

Following completion of construction of the removal action, Respondent shall ensure that all post-removal actions needed to ensure the continued long-term integrity and effectiveness of the completed removal action as constructed by Respondent and approved by EPA are performed.

II. *Supplemental Investigation Work Plan*

EPA approved a Supplemental Investigation Work Plan and associated Quality Assurance Project Plan, attached as Appendix 4 to the AOC, and a conceptual Preliminary Early Removal Action Work Plan, attached as Appendix 5 to the AOC, on the date that the AOC became effective.

Within 30 days from the effective date of the AOC, Respondent shall implement the Supplemental Investigation Work Plan. The Respondent shall submit a Draft Supplemental Investigation Report within 30 days of receipt of the complete laboratory analytical data for the supplemental investigation field work and no later than six (6) months from the effective date of the AOC, unless the submittal deadline

is extended by EPA in its sole discretion. The Draft Supplemental Investigation Report shall be provided to EPA in both paper and electronic format. Electronic submittals shall be provided in Microsoft Word format. One paper copy and one electronic copy shall be provided to Mr. Christopher Dudenhoeffer with the Missouri Department of Natural Resources, or MDNR. The Draft Supplemental Investigation Report shall include a description of field activities during the site investigation, results of all field and analytical testing generated on behalf of Respondent, and conclusions and recommendations for any additional testing necessary to support preparation of a detailed RADIWP.

III. *Removal Action Design and Implementation Work Plan*

Within 30 days of EPA approval of the Supplemental Investigation Report, Respondent shall prepare and submit for EPA review and approval a RADIWP which presents the plans and specifications for the removal action, and describes the proposed tasks and schedules associated with implementation of the action. The Draft RADIWP shall be provided to EPA in both paper and electronic format. Two paper copies and one electronic copy shall be provided to EPA. Electronic submittals shall be provided in Microsoft Word format. One paper copy and one electronic copy shall be provided to Mr. Christopher Dudenhoeffer with MDNR. The RADIWP shall demonstrate sound engineering judgment and be reviewed and stamped with the seal of a registered professional engineer registered in the state of Missouri prior to submittal to EPA. The RADIWP shall provide the following:

A. Management Chapter

The RADIWP shall include a clear and concise description of roles, relationships, and assignment of responsibilities among Respondent, Project Coordinator, Quality Assurance Officer, Construction Supervisor, and Construction Personnel.

B. Construction Chapter

The RADIWP shall include information necessary to implement the removal action, including:

1. Designs, plans, and specifications, and other construction documents necessary to achieve erosional and geotechnical stability of the Site;

2. Field data collected, supporting calculations, designs, drawings, and specifications which demonstrate that the construction will achieve long-term reduction in the threat of release of hazardous substances. Among the design aspects to be addressed are the following:

   a. Specifications of materials to be used for final cover, including its gradation and total lead, cadmium, and zinc concentrations, where cover soil shall contain no more than 25 percent rock by weight; specifications for any riprap, gravel, or other construction material incorporated into the removal action design;

   b. Description of the revegetation strategy, including seed bed preparation, seeding, fertilizer, proposed amendments, soil sources, and any temporary seeding strategy; seeding schedule; identification of fertilizers; application rates and times; identification of soil amendments and application rates; description of hydromulching techniques and products;

c. Description of construction methods, equipment, and personnel to accommodate the placement of cover material at the final grade; and

d. Any assumptions made by Respondent in developing design parameters shall be clearly stated and supported by sound engineering practices.

3. Removal Action Schedule that describes each phase of the removal action. For each construction milestone, the schedule shall provide specific time periods starting from EPA's approval of the Work Plan to completion of the construction milestones and the project. The Removal Action shall be completed within three (3) years of the effective date of the AOC;

4. Detailed description of Site preparation activities, including access agreements, establishment of security and control, definition of clearing and grubbing limits, establishment of work and support areas, and definition of decontamination areas;

5. Description of construction quality control process necessary to successfully construct the design including grade control method and geotechnical sampling during construction;

6. Dewatering contingency plans and fluids management procedures including details for drainage ways, weirs, and retention basins;

7. Run-on and run-off controls during construction, including location, frequency, and methods for collecting water samples which will ensure compliance with NPDES or other water quality standards;

8. Spill prevention and management;

9. Detailed description of on-site soil storage and waste processing methods;

10. Design of a dust suppression program to be used during site material handling activities, and description of the methods to be used to control fugitive dust and monitor air quality. The regrading and construction techniques must minimize the release of contaminants via airborne emissions and surface runoff. Chemical dust suppressants and/or water shall be used during Site activities to minimize generation of airborne emissions. Respondent must monitor the ambient air during stabilization and cover construction. Ambient air monitored during performance of the removal activities shall meet National Primary and Secondary Ambient Air Quality Standards and/or levels protective of human health as determined by EPA;

11. List of heavy equipment and operators dedicated to the project and a description of decontamination procedures for heavy equipment;

12. Identification of the method of transportation for any contaminated materials to be removed from the Site, manifesting requirements in accordance with federal and state Department of Transportation regulations, and material quantity accounting

procedures. In addition, Respondent shall provide written notice prior to any off-site shipment of hazardous material;

13. A description of how the removal action will comply with ARARs and meet substantive permitting requirements.

C. Quality Assurance Project Plan (QAPP) Chapter

For all chemical analyses, Respondent shall discuss the field sampling protocol, frequency of sampling, parameters to be analyzed, and the name and certification requirements for all laboratories to be used. Chemical analysis will be conducted for at least the following activities:

1. Compliance with ARARs (e.g., NPDES parameters);

2. Analysis to document clean cover materials;

3. Analysis of generated or discharged surface water or groundwater; and

4. Analysis to confirm removal of contamination from those areas outside the capping footprint.

IV. *Site Specific Health and Safety Plan (SSHP)*

Respondent is responsible for developing and implementing a health and safety program that is in compliance with OSHA regulations and protocols. The SSHP shall cover both design data collection and construction activities. The SSHP shall be completed prior to intrusive field work. EPA will review the plan to assure that all necessary elements are included but will not provide formal approval.

V. *Execution*

Respondent shall execute the Removal Action in accordance with the EPA-approved RADIWP. As specified in Section 104(a)(1) of CERCLA, as amended by SARA, EPA will provide oversight of Respondent's activities throughout the Removal Action. Respondent shall support EPA's initiation and conduct of activities related to the implementation of oversight activities.

VI. *Removal Action Report*

Respondent shall submit for EPA review and approval a Removal Action Report within sixty (60) days after the activities described herein have been accomplished. The Removal Action Report shall be provided to EPA in both paper and electronic format. Two paper copies and one electronic copy shall be provided to EPA. Electronic submittals shall be provided in Microsoft Word format. One paper copy and one electronic copy shall be provided to Mr. Christopher Dudenhoeffer with MDNR. The Removal Action Report shall include:

a. as-built drawings of final constructed configurations;
b. a description of measures taken at the Site;
c. quality control and monitoring results during construction;

d. documentation that a sufficient cover has been established, in compliance with ARARs set forth in the Preliminary Early Removal Action Work Plan;
e. a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement;
f. a listing of quantities and types of materials removed off-Site or handled on-Site;
g. a discussion of removal and disposal options considered for those materials and a listing of the ultimate destination(s) of those materials;
h. a presentation of the analytical results of all sampling and analyses performed and empirical data, observations, photographs of Site construction, and calculations which demonstrate that the removal action will provide long-term erosional stability of the capped wastes; and
i. accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits).
j. The Removal Action Report shall be reviewed and stamped with the seal of a registered professional engineer registered in the state of Missouri, and shall include the following certification signed by a responsible corporate official of Respondent or Respondent's Project Coordinator:

"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 have no personal knowledge that the information submitted is other than 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."

VII. *Post-Removal Site Control*

Respondent shall provide long-term operations and maintenance of the capped areas, retention basins, and other necessary permanent features of the removal action to ensure the long-term effectiveness and integrity of the removal action as constructed by Respondent and as described in the EPA-approved Removal Action Report. At the same time that Respondent submits to EPA the Removal Action Report, Respondent shall also submit for EPA review and approval a Post-Removal Site Control Plan in both paper copy and electronic format. This Plan shall provide for all inspection, operation, and maintenance measures that are necessary to ensure the continued long-term effectiveness and integrity of the removal action for the Site. The Plan shall provide a schedule for the implementation of repair and maintenance work at the Site. The Plan will incorporate proposed draft language for an environmental covenant for portions of the Site that require permanent activity and use limitations to ensure the ongoing effectiveness of the removal action in protecting human health and the environment, and a schedule for filing that environmental covenant. The Plan shall also include a Construction Worker Safety Plan to ensure protection of future workers performing intrusive activities in areas of known contamination at the Site and shall include a Soil Management Plan to ensure proper characterization, management, and disposal of any potentially contaminated soil or waste generated by future intrusive activities in areas of known contamination at the Site. Once approved by EPA, Respondent shall implement the Post-Removal Site Control Plan.

The Post-Removal Site Control Plan shall describe timing and details of sampling inspection processes, steps to develop corrective actions, the EPA notification process for non-routine issues, measures to enhance and repair vegetation growth, measures to repair rocked slopes, and land use development. At a

minimum, the Site shall be inspected by Respondent every three (3) months for the first two (2) years following construction of the removal action, and every six (6) months thereafter. The Plan shall be reviewed and stamped with the seal of a registered professional engineer registered in the state of Missouri.

Respondent shall provide EPA with a written inspection report of the Site condition within thirty (30) days of the end of each Site inspection period. At a minimum, the inspection report shall provide a description of the condition of the rock cover, soil cover, vegetation, and Site security measures. The report shall also provide all data results for samples collected at the Site and describe the details of any damage/deterioration to the cover materials. The inspection report shall be certified in writing in the same manner as the Removal Action Report as described in Section VI(j) of this SOW.

VIII. *Community Relations*

Respondent shall provide copies of the final Work Plan, design documents, and other pertinent information to EPA. EPA will then submit the information to the Site Repository, located at the Fredericktown branch of the Ozark Regional Library. Respondent shall also participate, as requested by EPA, in meetings with EPA and the community to discuss design and/or construction issues.

VIII. *Monthly Progress Reports*

Throughout the course of the removal action, until the Removal Action Report is approved by EPA, Respondent shall submit to EPA written monthly progress reports in accordance with the AOC. The monthly progress reports shall include, at a minimum:

1. A description of the actions completed during the reporting period, including any problems encountered;

2. A description of actions scheduled for completion during the reporting period which were not completed along with a statement indicating why such actions were not completed and an anticipated completion date;

3. Copies of all analytical data received during the reporting period;

4. Any proposed revisions to the project schedule for review and approval by EPA; and

5. A description of the actions which are scheduled for completion during the next reporting period, including anticipated problems and planned resolutions of past or anticipated problems.

IX. *Submission of Deliverables*

Respondent shall direct all submissions required by this SOW to:

Kurt Limesand, RPM
EPA Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219,
and by email to *limesand.kurt@epa.gov*.

Respondent shall direct all submissions required by this SOW to be sent to MDNR to:

Christopher Dudenhoeffer
Remedial Project Management Unit, Superfund Section
Hazardous Waste Program
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102,

and by email to: *christopher.dudenhoeffer@dnr.mo.gov*.

X. *Schedule of Deliverables*

Deliverable	**Schedule**
Implement Supplemental Investigation	30 days after effective date of the AOC
Draft Supplemental Investigation Report	Within 30 days of receipt of final lab data, but not later than six months after the effective date of the AOC, unless extended by EPA
Removal Action Design and Implementation Work Plan	Within 30 days of EPA approval of Supplemental Investigation Report
Removal Action	Completion within three years of the issuance of the AOC
Removal Action Report	Within 60 days after the completion of the Removal Action
Post-Removal Site Control Plan	Within 60 days after the completion of the Removal Action
Monthly Progress Reports	28th day of each month after effective date of the AOC until EPA provides Notice of Completion of Work