

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 7

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ENVIRONMENTAL PROTECTION
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IN THE MATTER OF:

ORONOGO-DUENWEG MINING
BELT SUPERFUND SITE,
also known as,
JASPER COUNTY SUPERFUND SITE,
OPERABLE UNIT #1,
MINING WASTE CLEANUP

UNILATERAL
ADMINISTRATIVE ORDER

RESPONDENTS,
CHILDRESS ROYALTY COMPANY
Joplin, Missouri
and
ACME LAND COMPANY
Joplin, Missouri

US EPA REGION 7

DOCKET No. CERCLA-07-2009-0003

Proceeding Under Section 106(a) of the
Comprehensive Environmental Response,
Compensation, and Liability Act of 1980,
as amended, 42 U.S.C. 9606(a).

UNILATERAL ADMINISTRATIVE ORDER
FOR REMEDIAL DESIGN AND REMEDIAL ACTION

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UNILATERAL ADMINISTRATIVE ORDER FOR REMEDIAL DESIGN AND REMEDIAL ACTION

I. INTRODUCTION AND JURISDICTION

1. This Order directs Respondents to perform a remedial design for the remedy described in the Record of Decision for the Oronogo/Duenweg Mining Belt Superfund Site (Site) also known as the Jasper County Site, Operable Unit No. 01, dated September 30, 2004, and to implement the design by performing a remedial action. This Order is issued to Respondents by the United States Environmental Protection Agency (EPA) under the authority vested in the President of the United States by section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. 9606(a). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580 (52 Fed. Reg. 2926, January 29, 1987), and was further delegated to EPA Regional Administrators on September 13, 1987, by EPA Delegation No. 14-14-B. The Regional Administrator for Region 7 re-delegated this authority to the Director, Superfund Division on April 19, 1999, by Delegation No. R7-14-14-B.

II. DEFINITIONS

2. Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in the statute or its implementing regulations. Whenever terms listed below are used in this Order or in the documents attached to this Order or incorporated by reference into this Order, the following definitions shall apply:

a. "Affected Media" shall mean the physical attributes of Parcels and Associated Tributaries affected by releases of and from Source Material including but not limited to ground water, surface water, sediments and soils.

b. "Associated Tributaries" shall mean those intermittent tributaries, including but not limited to any stream or miners ditch other than the Class P Streams as categorized by the State, 10 CSR 20-7.031, that drain from or through each Parcel to the intersection of the receiving Class P Stream. The "Associated Tributaries" subject to this Order are highlighted in red or dark yellow on the maps attached as Attachment 1 to the Statement of Work.

c. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. Section 9601 et seq.

d. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any

period of time under this Order, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the end of the next working day.

- e. "EPA" shall mean the United States Environmental Protection Agency.
- f. "MDNR" shall mean the Missouri Department of Natural Resources.
- g. "National Contingency Plan" or "NCP" shall mean the National Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. Section 9605, codified at 40 C.F.R. Part 300, including any amendments thereto.
- h. "Operation and Maintenance" or "O&M" shall mean all activities required under the Operation and Maintenance Plan developed by Respondents pursuant to this Order and Section 3.7 of the Statement of Work and as approved by EPA.
- I. "Paragraph" shall mean a portion of this Order identified by an arabic numeral.
- j. "Parcel" shall mean those portions of the Site identified and set forth in Table 1 of the Statement of Work subject to Remedial Action under this Order including all mine and mill wastes and/or associated metals contamination, such as transition zone soils, emanating or spilling over from these parcels onto adjacent lands.
- k. "Performance Standards" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria or limitations, identified in the Record of Decision and Statement of Work, that the Remedial Action and Work required by this Order must attain and maintain.
- l. "Record of Decision" or "ROD" shall mean the EPA Record of Decision relating to the Site, Operable Unit 01, signed on September 30, 2004, by the Superfund Division Director, EPA Region 7, and all attachments thereto.
- m. "Remedial Action" or "RA" shall mean those activities, except for Operation and Maintenance, to be undertaken by Respondents to implement the final plans and specifications submitted by Respondents pursuant to the Remedial Design Work Plan approved by EPA, including any additional activities required under Sections X, XI, XII, XIII, and XIV of this Order.
- n. "Remedial Design" or "RD" shall mean those activities to be undertaken by Respondents to develop the final plans and specifications for the Remedial Action pursuant to the Remedial Design Work Plan.
- o. "Respondents" shall mean Childress Royalty Company and Acme Land Company.

p. "Response Costs" shall mean all costs, including direct costs, indirect costs, and accrued interest incurred by the United States and the State to perform or support response actions at the Site. Response costs include but are not limited to the costs of overseeing the Work, such as the costs of reviewing or developing plans, reports and other items pursuant to this Order and costs associated with verifying the Work.

q. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the Remedial Design, Remedial Action, and Operation and Maintenance at the Site, as set forth in Attachment 2 to this Order. The Statement of Work is incorporated into this Order and is an enforceable part of this Order.

r. "Section" shall mean a portion of this Order identified by a roman numeral and includes one or more paragraphs.

s. "Site" shall mean the Oronogo-Duenweg Mining Belt Superfund Site, commonly known as the Jasper County Superfund Site, encompassing approximately 270 square miles, including but not limited to all the Designated Areas, surface streams, and any other areas of lead and zinc mining waste contamination located in Jasper County, Missouri and the Iron Gates Extension Designated Area in Newton County, Missouri. The entire Site is depicted generally on the Site Map attached as Attachment 3 to this Order.

t. "Source Materials" shall mean mill wastes (commonly referred to as chat, fine tailings and vegetated chat), smelter wastes, and acid generating overburden.

u. "State" shall mean the State of Missouri.

v. "United States" shall mean the United States of America.

w. "Work" shall mean all activities Respondents are required to perform under this Order to implement the ROD for the Mining Waste Cleanup Operable Unit 01, including Remedial Design, Remedial Action, Operation and Maintenance, and any activities required to be undertaken pursuant to Sections VII through XXIV, and XXVII of this Order.

III. FINDINGS OF FACT

3. The Site is located in Jasper and Newton Counties, Missouri. About 90,000 people reside within the Site, which encompasses about 270 square miles. See Attachment 3, the Site Map.

4. The Site is in the Missouri portion of the Tri-State Mining District, which also includes portions of Kansas and Oklahoma. The District provided nearly continuous production of heavy metals including lead and zinc from the 1850s until 1970. Hundreds of mines and mills and about 17 smelters were operated within the Site. About 1,200, mostly defunct, operators conducted mining, milling or smelting at this Site. Lead and zinc mining, milling and smelting

operations generated about 150 million tons of wastes, of which about 10 million tons remain on-site.

5. EPA has taken actions at the Site in response to a release or a substantial threat of a release of hazardous substances within the Site. On August 30, 1990 (55 Fed. Reg. 35502), pursuant to section 105 of CERCLA, 42 U.S.C. Section 9605, EPA placed the Oronogo-Duenweg Mining Belt Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B.

6. This Order addresses Operable Unit No. 1 (OU-1) at the Site. To prioritize response actions for human health risks and conduct feasibility studies in phases, EPA divided the Site into five OUs based on contaminated media. OU-1 is the Mining and Milling Wastes Cleanup; OU-2/3, Smelter and Mine Waste Residential Yard Cleanup; OU-4, Alternate Drinking Water Supply; and OU-5, Spring River Watershed. Remedial actions for OU-4 and OU-2/3 are complete; OU-5 is under investigation.

7. In 1991, the EPA commenced a site-wide Remedial Investigation and Feasibility Study (RI/FS) for the Site pursuant to 40 C.F.R. § 300.430. The RI Report was completed in 1995. The OU-1 FS Report was completed in 2003.

a. Due to the large area impacted by mining and the non-contiguous nature of the wastes, the EPA divided the Site into 11 separate geographic areas for investigation, referred to as Designated Areas (DAs). The DAs coincide with locations of old mining camps and on-site Source Materials. The DAs, named after the camps, include Oronogo/Duenweg, Waco, Neck City/Alba, Bellville Chemical, Klondike, Iron Gates, Iron Gates Extension, Joplin, Carterville, Thoms and Snap.

b. The EPA and a number of potentially responsible parties (PRPs) under EPA's oversight completed the site-wide RI Report, which contains data and analysis that support separate feasibility studies for each OU. The Respondents did not participate in the RI or FS response activities. A group of PRPs completed the OU-1 Feasibility Study (FS) Report. In order to obtain representative samples of 10 million tons of mining waste materials spread over 270 square miles, the site-wide RI characterized the waste materials. Representative samples were obtained from the certain categories of wastes including but not limited to tailings, chat, vegetated chat, transition zone soils, sediments, stream water, pond water and mining pit water. Thus, the site-wide RI together with the OU-1 FS Reports describe the nature and extent of contamination in the Source Materials, Affected Media and Associated Tributaries.

8. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the OU-1 feasibility study, the availability of the OU-1 FS Report and of the proposed plan for remedial action on July 19, 2004, in the Joplin Globe newspaper. EPA provided an opportunity for written and oral comments from the public on the proposed plan for remedial action.

9. The decision by EPA on the remedial action to be implemented at the Site is embodied in a final Record of Decision (ROD) for OU-1, issued on September 30, 2004, on which the State has given its concurrence. The ROD includes a responsiveness summary to the public comments. Notice of the final plan was published in accordance with Section 117(b) of CERCLA. The Record of Decision is attached to this Order as Attachment 1 and is incorporated by reference. The ROD is supported by an administrative record that contains the documents and information upon which EPA based the selection of the response action. The administrative record for OU-1 is available in the EPA Region 7 Offices at 901 N. 5th Street, Kansas City, KS 66101.

10. The hazardous substances at the Site are the contaminants of concern (COCs) identified in the ROD as cadmium, lead and zinc found in the Source Materials and Affected Media. The COCs are identified as hazardous substances in the EPA regulations at 40 C.F.R. Section 302.4. Exposure to the COCs may be harmful to human health, animals or the environment.

a. Exposure to cadmium and its various forms may cause such effects as teratogenicity, reproductive toxicity and kidney disorders in humans and cancer in animals.

b. Exposure to lead through ingestion may affect the central nervous system, peripheral nervous system, cause kidney and blood disorders in humans, and is particularly harmful to young children.

c. Exposure to zinc and its various forms may cause such effects as fever, vomiting, stomach cramps, and defective mineralization of the bone in humans. Exposure to zinc can cause acute toxicity in fresh water organisms.

11. Mining, milling and smelter wastes on the Site release or threaten the release of COCs into the environment. These wastes include Source Materials such as chat, fine tailings, vegetated chat, smelter wastes and acid generating overburden from mining, milling and smelting ores.

a. Source Materials have been disposed on-site during the Respondents' ownership or operations. Source Materials are present on Respondents' Parcels.

b. The cleanup levels for remediation of the Source Materials are established in the ROD. Representative samples of the Source Materials taken on-site exceed 41 milligrams per kilogram (mg/kg) cadmium, 804 mg/kg lead or 6,424 mg/kg zinc, which are risk-based levels established in the Baseline Ecological Risk Assessment (BERA) included in the RI Report. These levels are site-specific criteria that protect terrestrial biota from exposure to the COCs. Samples of Source Materials taken on-site also exceed 400 mg/kg lead, which is the risk-based level established in the Human Health Risk Assessment (HHRA) in order to protect people from exposure to the COCs. The ROD established the cleanup levels based on the lower of the two risk-based levels

for lead and the terrestrial risk-based levels for cadmium and zinc. The cleanup levels are 40 mg/kg cadmium, 400 mg/kg lead and 6,400 mg/kg zinc. These site-specific cleanup levels (or action levels) represent the chemical-specific standards that define acceptable risk levels based on site-specific exposure scenarios described in the BERA and HHRA Reports.

c. Source Materials include but are not limited to chat. Representative samples of chat were taken from the Oronogo/Duenweg DA, where Respondents' Parcels are located. The analysis of chat samples is representative of chat found on Respondents' Parcels. The following table shows that samples exceed action levels for Source Materials.

Analysis of Samples: COCs in Chat at Oronogo/Duenweg DA

Cadmium (mg/kg) Action Level = 40 mg/kg			Lead (mg/kg) Action Level = 400 mg/kg			Zinc (mg/Kg) Action level = 6,400 mg/kg		
High	Low	Ave.	High	Low	Ave.	High	Low	Ave.
152	3.7	54	6,000	72	943	37,200	466	9,253

d. Source Materials include but are not limited to vegetated chat. Representative samples of vegetated chat were taken from the Site including Respondents' Parcels show that COCs in vegetated chat exceed the action levels for the Source Materials including cadmium (40 mg/kg), lead (400 mg/kg) and zinc (6,400 mg/kg). Analytical results of vegetated chat samples taken from Respondents' Parcels show 59.8 mg/kg and 62.3 mg/kg cadmium, 1,100 mg/kg lead and 8,000 mg/kg and 9,300 mg/kg zinc.

12. The release and migration of COCs from weathering of the Source Materials contaminate Affected Media including but not limited to soils, ground water, surface waters and sediments including Associated Tributaries as well as other lakes, ponds, mining pits, rivers and State designated Class P streams.

a. Affected Media, including contaminated soils and sediments, are found on the Respondents' Parcels and in their Associated Tributaries. Contaminated soils are found near mining wastes piles. Contaminated sediments are found in tributaries and streams downstream from mining waste piles.

b. The action levels for remediation of the soils are the same as the action levels for Source Materials, i.e., 40 mg/kg cadmium, 400 mg/kg lead and 6,400 mg/kg zinc. The action levels for remediation of the sediments are site-specific risk-based levels to protect aquatic biota described in the BERA and established in the ROD. The sediment action levels are 2 mg/kg cadmium, 70 mg/kg lead, and 250 mg/kg zinc.

c. Representative samples of soils were taken from the Oronogo/Duenweg DA, where Respondents' Parcels are located. Analytical results from soil samples taken from Respondents' Parcels contain hazardous substances including the COCs. The analysis of soils samples is representative of such Affected Media found on Respondents' Parcels. The following table shows that soil samples exceed action levels for this Affected Media.

Analysis of Samples: COCs in Soil at Oronogo/Duenweg DA

Cadmium (mg/kg) Action Level = 40 mg/kg			Lead (mg/kg) Action Level = 400 mg/kg			Zinc (mg/kg) Action Level = 6,400 mg/kg		
High	Low	Ave.	High	Low	Ave.	High	Low	Ave.
265	1.4	28	3,600	41	653	39,700	140	4,060

d. Representative samples of sediments were taken from Center Creek and Turkey Creek, which are downgradient from Respondents' Parcels and Associated Tributaries in the Oronogo/Duenweg DA. The analysis of sediment samples is representative of such Affected Media found on Respondents' Parcels and their Associated Tributaries. The following tables shows that sediment samples exceed action levels for this Affected Media.

CENTER CREEK - Sediment Samples

Cadmium (mg/kg) Action Level = 2 mg/kg		Lead (mg/kg) Action Level = 70 mg/kg		Zinc (mg/kg) Action Level = 250 mg/kg	
High	Low	High	Low	High	Low
84	6.0	2,120	99	13,800	1,370

TURKEY CREEK - Sediment Samples

Cadmium (mg/kg) Action Level = 2 mg/kg		Lead (mg/kg) Action Level = 70 mg/kg		Zinc (mg/kg) Action Level = 250 mg/kg	
High	Low	High	Low	High	Low
86	4.9	1,100	57	18,000	1,070

e. Analysis of surface water quality downgradient from Respondents' Parcels and Associated Tributaries shows the presence of the COCs. Analytical results from surface water samples taken from Center Creek and Turkey Creek show levels above the federal water quality criteria (WQC)

guidelines established under the Clean Water Act, described in the federal regulations at 40 C.F.R. Section 131. WQC for lead, cadmium and zinc are action levels established for the remediation of surface water at the Site based on chronic exposure to the COCs. WQC for the COC are calculated based on the hardness observed in the individual surface water bodies.

- i. The federal WQC for cadmium and zinc were calculated (0.0019 mg/L and 0.21 mg/L, respectively) and were exceeded in Turkey Creek during high-flow sampling events based on analysis of water samples showing 0.0021 mg/L cadmium and 0.647 mg/L zinc, downgradient of Respondents' Parcels.
- ii. The federal WQC for cadmium and lead were calculated (0.0017 mg/L and 0.0050 mg/L, respectively) and were exceeded in Center Creek during high-flow sampling events based on analysis of water samples showing 0.0022 mg/L cadmium and 0.050 mg/L lead near Smithfield downgradient from Respondents' Parcels.

13. The health risks for children who live on and near mill wastes, particularly those who also consume backyard garden produce, include exposure to lead in soils, mill wastes and garden produce. The action level for clean up of mining wastes is 400 mg/kg lead as established in the ROD for people living on or near soils or mine waste. Source Materials and Affected Media on Respondents' Parcels may exceed 400 mg/kg lead as shown above in subparagraphs 11.c., 11.d. and 12.c.

14. The ecological risks at the Jasper County Site are driven by 1) exposure of aquatic biota to surface waters and sediments that contain cadmium, lead or zinc; and 2) exposure of terrestrial vermivores to earthworms in soils that exceed risk-based threshold criteria established for the Site. Surface waters, sediments, soils and other Affected Media and Source Materials at the Site may exceed the action levels established to protect aquatic and terrestrial biota.

15. The remedial actions necessary to address risks from the Source Material and Affected Media located on the Site include the following components of the ROD. The SOW includes such remedial actions as described in the ROD. These response actions must be undertaken to address human health and ecological risks at the Respondents' Parcels and Associated Tributaries.

- Excavation and removal, consolidation for subsequent use, or capping of source material, contaminated soils and selected stream sediments exceeding remedial action levels defined in the ROD.
- Subaqueous disposal of excavated source material and sediments in mine pits or subsidences.
- Recontouring and revegetating excavated areas.
- Plugging of selected mine shafts and surface water diversion from mine openings.
- A monitoring program for assessing the effect of cleanup on Site streams.
- Institutional controls to protect the remedy and regulate future development.

16. The Respondents are current owners and former owner/operators of properties located within the Site.

a. Current owner and former owner/operator Respondent Childress Royalty Company (CRC or Childress) is the owner of property contaminated with mining and milling wastes and is a former owner or operator of mines at the time of disposal of hazardous substances. Beginning in 1936, CRC acquired mining properties and leases, received royalties or conducted mining at the Site. CRC sold or gave away some properties where hazardous substances were disposed during its ownership or operations. CRC retains title to other such properties. During this time of ownership or operation, hazardous substances, including some or all of those described in this section, were disposed of at the Site on CRC properties, which includes the Parcels identified in the SOW.

b. Current owner and former owner/operator Respondent Acme Land Company (Acme) is the owner of property contaminated with mining and milling wastes and is a former owner or operator of mines at the time of disposal of hazardous substances. Beginning in 1945, Acme acquired mining properties and leases or conducted mining at the site. Acme sold some properties where hazardous substances were disposed during its ownership or operations. Acme retains title to other such properties. During this time of ownership or operation, hazardous substances, including some or all of those described in this section, were disposed of at the Site on Acme properties, which includes the Parcels identified in the SOW.

c. The Respondents identified in subparagraph 16.a. and 16.b., are collectively referred to as "Respondents."

d. The contamination and endangerment at this Site constitute an indivisible injury at the properties presently owned and formerly owned or operated by the Respondents including their Parcels and Associated Tributaries as identified for each Respondent in the Statement of Work, Table 1, List of Parcels.

IV. CONCLUSIONS OF LAW AND DETERMINATIONS

17. The Jasper County Site is a "facility" as defined in section 101(9) of CERCLA, 42 U.S.C. Section 9601(9).

18. Respondents each are a "person" as defined in section 101(21) of CERCLA, 42 U.S.C. Section 9601(2).

19. Respondents each are a "liable party" as defined in section 107(a) of CERCLA, 42 U.S.C. 9607(a), and are subject to this Order under section 106(a) of CERCLA, 42 U.S.C. Section 9606(a).

20. The substances listed in paragraph 10 are found at the Site and are "hazardous substances" as defined in section 101(14) of CERCLA, 42 Section U.S.C. 9601(14).
21. These hazardous substances have been and are being released from the Site into the soil, groundwater, surface water and sediments.
22. The past and present disposal and migration of hazardous substances from the Site are a "release" as defined in section 101(22) of CERCLA, 42 U.S.C. Section 9601(22).
23. The potential for future migration of hazardous substances from the Site poses a threat of a "release" as defined in section 101(22) of CERCLA, 42 U.S.C. Section 9601(22).
24. The release of one or more hazardous substances from the facility may present an imminent and substantial endangerment to the public health or welfare or the environment. The actions required by this Order are necessary to protect the public health, welfare, and the environment.
25. Other potentially responsible parties have entered into settlements with EPA for conducting OU-1 RD/RA work including Blue Tee Corp. (BT) and Gold Fields Mining, LLC. (GF) under their proposed Consent Decree, *US v. Blue Tee Corp. and Gold Fields Mining LLC*, Civil Action No. 3:08-cv-05114-JCE. Respondents' obligations under this Order may be fulfilled by jointly participating with BT and GF for any Work to be performed at the Respondents' Associated Tributaries in the Oronogo/Duenweg DA, described in Attachment 2, the SOW, Table 1 List of Parcels and Associated Tributaries. Any portion of the Work at the Respondents' Associated Tributaries in the Oronogo/Duenweg DA that is undertaken by BT or GF does not excuse Respondents from performing under this Order. Respondents are joint and severally liable with BT or GF for all obligations at said Associated Tributaries as set forth in this Order. Respondents are obligated to ensure that said Work be completed in a manner consistent with the requirements of this Order.

V. NOTICE TO THE STATE

26. On or about November 24, 2008, prior to issuing this Order, EPA notified the State of Missouri, Department of Natural Resources that EPA would be issuing this Order.

VI. ORDER

27. Based on the foregoing, Respondents are hereby ordered to comply with the following provisions, including but not limited to all attachments to this Order, all documents incorporated by reference into this Order, and all schedules and deadlines in this Order, attached to this Order, or incorporated by reference into this Order:

VII. NOTICE OF INTENT TO COMPLY

28. Respondents shall provide, not later than five (5) days after the effective date of this Order, written notice to EPA's Remedial Project Manager (RPM) stating whether they will comply with the terms of this Order. If Respondents do not unequivocally commit to perform the RD and RA as provided by this Order, they shall be deemed to have violated this Order and to have failed or refused to comply with this Order. Respondents' written notice shall describe, using facts that exist on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondents under sections 106(b) and 107(c)(3) of CERCLA. The absence of a response by EPA to the notice required by this paragraph shall not be deemed to be acceptance of Respondents' assertions.

VIII. PARTIES BOUND

29. This Order shall apply to and be binding upon each Respondent identified in paragraph 3, their directors, officers, employees, agents, successors, and assigns. Each Respondent is responsible for carrying out all activities required by this Order and the SOW for its respective Parcels and Associated Tributaries as identified in the SOW. No change in the ownership, corporate status, or other control of any Respondents shall alter any of the Respondents' responsibilities under this Order.

30. Respondents shall provide a copy of this Order to any prospective owners or successors before a controlling interest in Respondents' assets, property rights, or stock are transferred to the prospective owner or successor. Respondents shall provide a copy of this Order to each contractor, sub-contractor, laboratory, or consultant retained to perform any Work under this Order, within five days after the effective date of this Order or on the date such services are retained, whichever date occurs later. Respondents shall also provide a copy of this Order to each person representing any Respondents with respect to the Site or the Work and shall condition all contracts and subcontracts entered into hereunder upon performance of the Work in conformity with the terms of this Order. With regard to the activities undertaken pursuant to this Order, each contractor and subcontractor shall be deemed to be related by contract to the Respondent(s) within the meaning of section 107(b)(3) of CERCLA, 42 U.S.C. 9607(b)(3). Notwithstanding the terms of any contract, Respondents are responsible for compliance with this Order and for ensuring that their contractors, subcontractors and agents comply with this Order, and perform any Work in accordance with this Order.

31. Within five (5) days after the effective date of this Order each Respondent that owns real property comprising all or part of the Site shall record a copy or copies of this Order in the appropriate governmental office where land ownership and transfer records are filed or recorded, and shall ensure that the recording of this Order is indexed to the titles of each and every property at the Site so as to provide notice to third parties of the issuance and terms of this Order with respect to those properties. Respondents shall, within 15 days after the effective date of this Order, send notice of such recording and indexing to EPA.

32. Not later than sixty (60) days prior to any transfer of any real property interest in any property included within the Site, Respondents shall submit a true and correct copy of the transfer document(s) to EPA, and shall identify the transferee by name, principal business address and effective date of the transfer.

IX. WORK TO BE PERFORMED

33. Respondents shall cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Respondents shall participate in the preparation of such information for distribution to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.

34. All aspects of the Work to be performed by Respondents pursuant to this Order shall be under the direction and supervision of a qualified project manager the selection of which shall be subject to approval by EPA. Within seven (7) days after the effective date of this Order, Respondents shall notify EPA in writing of the name and qualifications of the project manager, including primary support entities and staff, proposed to be used in carrying out work under this Order.

35. With respect to any proposed project manager, Respondents shall demonstrate that the proposed project manager has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed project manager's Quality Management Plan (QMP). The QMP should be prepared in accordance with the specifications set forth in "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. If at any time Respondents proposes to use a different project manager, Respondents shall notify EPA and shall obtain approval from EPA before the new project manager performs any work under this Order.

36. EPA will review Respondents' selection of a project manager according to the terms of this paragraph and Section XIV of this Order. If EPA disapproves of the selection of the project manager, Respondents shall submit to EPA within thirty (30) days after receipt of EPA's disapproval of the project manager previously selected, a list of project managers, including primary support entities and staff, that would be acceptable to Respondents. EPA will thereafter provide written notice to Respondents of the names of the project managers that are acceptable to EPA. Respondents may then select any approved project manager from that list and shall notify EPA of the name of the project manager selected within twenty-one (21) days of EPA's designation of approved project managers.

Remedial Design

37. Within thirty (30) days after Respondents selects an approved project manager, the Respondents shall submit to EPA and the MDNR a work plan for the design and implementation

of the RD/RA (the RD/RA Work Plan) for all their Parcels and Associated Tributaries as defined in Table 1 of the Statement of Work. The Respondents' RD/RA Work Plan shall provide for design and implementation of the remedy as set forth in the ROD, in accordance with the SOW and for achievement of the Performance Standards and other requirements set forth in the ROD, this Order or the SOW. Respondents shall also, within thirty (30) days after Respondents select an approved project manager, prepare and submit to EPA for review, a Site Health and Safety Plan for field design activities. The Site Health and Safety Plan shall conform to the applicable Occupational Safety and Health Administration and EPA requirements, including but not limited to 54 Fed. Reg. 9294.

38. The RD/RA Work Plan shall be consistent with, and shall provide for implementing the Statement of Work, and shall comport with EPA's "Superfund Remedial Design and Remedial Action Guidance, OSWER Directive 9355.0-4A". Upon approval by EPA, the RD/RA Work Plan is incorporated into this Order as a requirement of this Order and shall be an enforceable part of this Order.

39. Upon approval of the RD/RA Work Plan by EPA, Respondents shall implement the RD/RA Work Plan according to the schedule in the approved RD/RA Work Plan. Any violation of the approved RD/RA Work Plan shall be a violation of this Order. The Respondents shall submit to the EPA and MDNR all plans, submittals and other deliverables required under their EPA-approved RD/RA Work Plan in accordance with the EPA-approved schedule for review and approval pursuant to Section XIV (EPA Review of Submissions). Unless otherwise directed by EPA, Respondents shall not perform further Work at the Site prior to EPA's written approval of the RD/RA Work Plan.

40. Sequencing RD/RA Work.

a. The Respondents' RD/RA Work Plan shall include a schedule for sequencing the Work as described in the SOW for each of their Parcels and Associated Tributaries. Sequencing of Work on the Respondents' Parcels and Associated Tributaries will be subject to EPA approval.

b. As described in the SOW, the Preliminary Design Document requirements and tasks for the Respondents' initial Parcel and Associated Tributaries shall begin within sixty (60) days of EPA's approval of the Respondents' RD/RA Work Plan. Preliminary Design Document and tasks on subsequent Parcels and Associated Tributaries for the Respondents shall begin no later than ninety (90) days prior to the due date for completing the Final Inspection Report for a given Parcel and Associated Tributaries. The RPM will notify the Respondents of the due date for the Final Inspection Report for each Parcel and Associated Tributaries.

41. The Respondents' RD/RA Work Plan shall include plans and schedules for implementation of all remedial design and pre-design tasks identified in the SOW, including, but not limited to: (1) Design Criteria Report; (2) Sampling and Analysis Plan (SAP); (3) Quality Assurance Project Plan (QAPP); (4) Health and Safety Plan; (5) Performance Standard Verification Plan; (6)

Construction Quality Assurance Plan; (7) Operation and Maintenance Plan; and (8) Institutional Controls Implementation Assurance Plan.

42. The Preliminary Design Document shall include, at a minimum, the following: (1) volume of tailings to be excavated and disposed of subaqueously; (2) volume and area of tailings to be consolidated and capped in-place; (3) volume of tailings to be consolidated for future sale by owner; (4) volume and area of soil exceeding remedial action levels; (5) location and capacity of voids to be used for subaqueous disposal; (6) location and description of surface water diversion structures; (7) location of overflowing shafts to be plugged and detailed plugging plans; (8) preliminary cap design; (9) design calculations and outline of design specifications; (10) access, easement and permit requirements; and (11) preliminary construction schedule. Any value engineering proposals must be identified and evaluated during this review.

43. Within 45 days after receipt of EPA's comments on the Preliminary Design Document, the Respondents shall submit the Pre-Final/Final Design Documents for each Parcel and its Associated Tributaries. The Pre-Final/Final Design Documents shall include, at a minimum, the following: (1) final volume calculations; (2) design specifications; (3) final design drawings; (4) final Performance Standard Verification Plan; and (5) final Project Schedule. The Pre-Final/Final Design Document shall detail the approach to quality assurance during construction activities at the Site, shall specify a quality assurance official ("QA Official"), independent of the Supervising Contractor, to conduct a quality assurance program during the construction phase of the project. Upon EPA approval, the Final Design is incorporated into this Order as a requirement of this Order and shall be an enforceable part of this Order.

44. Within 30 days after EPA approves the Pre-Final Design Document for a given Parcel and Associated Tributaries, Respondents shall notify EPA in writing of the name, title, and qualifications of any construction contractor proposed to be used in carrying out work under this Order.

a. With respect to any proposed construction contractor, Respondents shall demonstrate that the proposed construction contractor has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed project manager's QMP. The QMP should be prepared in accordance with the specifications set forth in "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

b. EPA shall thereafter provide written notice of the name(s) of the contractor(s) it approves, if any. Respondents may select any approved contractor from that list and shall notify EPA of the name of the contractor selected within twenty-one (21) days of EPA's designation of approved contractors. If at any time Respondents proposes to change the construction contractor, Respondents shall notify EPA and shall obtain approval from EPA as provided in this paragraph.

before the new construction contractor performs any work under this Order. If EPA disapproves of the selection of any contractor as the construction contractor, Respondents shall submit a list of contractors that would be acceptable to them to EPA within thirty (30) days after receipt of EPA's disapproval of the contractor previously selected.

45. If Respondents seek to retain a construction contractor to assist in the performance of the Remedial Action, then Respondents shall submit a copy of the contractor solicitation documents to EPA not later than five (5) days after publishing the solicitation documents.

Remedial Action

46. In addition to the Remedial Design components set forth above, the RD/RA Work Plan shall provide for construction and implementation of the design plans and specifications developed in accordance with the Remedial Design documents as approved by EPA. The Respondents' RD/RA Work Plan shall include the following: (1) schedule for completion of the Remedial Action at its Parcels and Associated Tributaries; (2) method for selection of the remedial action contractor(s); (3) methods for satisfying permitting requirements; (4) methodology for implementation of the Operation and Maintenance (O&M) Plan; (5) tentative formulation of the Remedial Action team; (6) construction quality control plan (by constructor); and (7) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. The RD/RA Work Plan also shall include a schedule for implementation of all Remedial Action tasks identified in the Final Design Document, as described in the SOW, including implementation and establishment of Institutional Controls according to the ICIAP, and shall identify the initial formulation of the Respondents' Remedial Action Project Team (including, but not limited to, any construction contractors identified below).

47. Within 30 days after EPA approves of the Respondents' Final Design Document for a given Parcel and its Associated Tributaries, the Respondents shall implement the RA at that Parcel and Associated Tributaries. The RA construction for a Parcel and its Associated Tributaries shall include activities and related reports for (1) the Pre-Construction Inspection (which shall occur prior to initiation of the RA on a given Parcel and its Associated Tributaries); (2) the Pre-Final Inspection; (3) the Final Inspection; and (4) the Parcel Construction Completion as specified in the SOW and its schedule, Sections 5 and 7. Unless otherwise directed by EPA, the Respondents shall not commence physical Remedial Action activities at the Site prior to approval of its RD/RA Work Plan.

48. The Respondents shall continue to implement the RA and O&M for its Parcels and Associated Tributaries until the Performance Standards are achieved and for so long thereafter as is otherwise required under this Order.

49. The Work performed by Respondents pursuant to this Order shall, at a minimum, achieve the Performance Standards specified in the Record of Decision and in Section 1.3 of the SOW.

50. Notwithstanding any action by EPA, Respondents remain fully responsible for achievement of the Performance Standards in the Record of Decision and Statement of Work. Nothing in this Order, or in EPA's approval of the Statement of Work, or in the Remedial Design or Remedial Action Work Plans, or approval of any other submission, shall be deemed to constitute a warranty or representation of any kind by EPA that full performance of the Remedial Design or Remedial Action will achieve the Performance Standards set forth in the ROD and in Section 1.3 of the Statement of Work. Respondents' compliance with such approved documents does not foreclose EPA from seeking additional work to achieve the applicable performance standards.

51. Respondents shall, prior to any off-site shipment of hazardous substances from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving state and to EPA's RPM of such shipment of hazardous substances. However, the notification of shipments shall not apply to any off-Site shipments when the total volume of all shipments from the Site to the State will not exceed ten (10) cubic yards.

a. The notification shall be in writing, and shall include the following information, where available: (1) the name and location of the facility to which the hazardous substances are to be shipped; (2) the type and quantity of the hazardous substances to be shipped; (3) the expected schedule for the shipment of the hazardous substances; and (4) the method of transportation. Respondents shall notify the receiving state of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by Respondents following the award of the contract for Remedial Action construction. Respondents shall provide all relevant information, including information under the categories noted in paragraph 51.a above, on the off-Site shipments as soon as practicable after the award of the contract and before the hazardous substances are actually shipped.

52. Within thirty (30) days after Respondents conclude that the Remedial Action has been fully performed at a given Parcel and its Associated Tributaries, Respondents shall so notify EPA and shall schedule and conduct a pre-final inspection to be attended by Respondents and EPA. The pre-final inspection shall be followed by final inspection after completion of any required corrective actions identified during the pre-final inspection. The final inspection shall be followed by a written final inspection report within fifteen (15) days of the final inspection, and the Parcel Construction Completion Report, submitted within thirty (30) days of the final inspection. The Parcel Construction Completion Report shall be signed by a registered professional engineer and Respondents' Project Coordinator certifying as described in Section 5.4 of the SOW that the Remedial Action has been completed in full satisfaction of the requirements of this Order and the SOW. If, after completion of the pre-final inspection and receipt and review of the written report, EPA determines for any given Parcel and its Associated Tributaries, that the Remedial Action or any portion thereof has not been completed in accordance with this Order, EPA shall notify Respondents in writing of the activities that must be undertaken to complete the Remedial Action

and shall set forth in the notice a schedule for performance of such activities. Respondents shall perform all activities described in the notice in accordance with the specifications and schedules established therein. If EPA concludes, following the initial or any subsequent certification of completion by Respondents that the Remedial Action has been fully performed in accordance with this Order, EPA may notify Respondents that the Remedial Action has been fully performed for the given Parcel and its Associated Tributaries. EPA's notification shall be based on present knowledge and Respondents' certification to EPA, and shall not limit EPA's right to perform periodic reviews pursuant to section 121(c) of CERCLA, 42 U.S.C. Section 9621(c), or to take or require any action that in the judgment of EPA is appropriate at the Site, in accordance with 42 U.S.C. Sections 9604, 9606, or 9607.

53. Within ninety (90) days after Respondents concludes that all phases of the Work for all of the Respondents' Parcels and Associated Tributaries have been fully performed, that the Performance Standards have been attained, and that Operation and Maintenance activities have been completed, Respondents shall submit to EPA a written report, the Final Construction Complete Report, by a registered professional engineer certifying as described in Section 5.4 of the SOW that the Work has been completed in full satisfaction of the requirements of this Order. EPA shall require such additional activities as may be necessary to complete the Work or EPA may, based upon present knowledge and Respondent's certification to EPA, issue written notification to Respondents that the Work has been completed, as appropriate, in accordance with the procedures set forth in Paragraph 52 for Respondents' certification of completion of the Remedial Action and as specified in the SOW. EPA's notification shall not limit EPA's right to perform periodic reviews pursuant to section 121(c) of CERCLA, 42 U.S.C. Section 9621(c), or to take or require any action that in the judgment of EPA is appropriate at the Site, in accordance with 42 U.S.C. Sections 9604, 9606, or 9607.

X. FAILURE TO ATTAIN PERFORMANCE STANDARDS

54. In the event that EPA determines that additional response activities are necessary to meet applicable Performance Standards, EPA may notify Respondents that additional response actions are necessary.

55. Unless otherwise stated by EPA, within thirty (30) days of receipt of notice from EPA that additional response activities are necessary to meet any applicable Performance Standards, Respondents shall submit for approval by EPA a work plan for the additional response activities. The plan shall conform to the applicable requirements of sections IX, XVI, and XVII of this Order. Upon EPA's approval of the plan pursuant to Section XIV, Respondents shall implement the plan for additional response activities in accordance with the provisions and schedule contained therein.

XI. EPA PERIODIC REVIEW

56. Under section 121(c) of CERCLA, 42 U.S.C. Section 9621(c), and any applicable regulations, EPA may review the Site to assure that the Work performed pursuant to this Order

adequately protects human health and the environment. Until such time as EPA certifies completion of the Work, Respondents shall conduct the requisite studies, investigations, or other response actions as determined necessary by EPA in order to permit EPA to conduct the review under section 121(c) of CERCLA. As a result of any review performed under this paragraph, Respondents may be required to perform additional work or to modify work previously performed.

XII. ADDITIONAL RESPONSE ACTIONS

57. EPA may determine that in addition to the work identified in this Order and attachments to this Order, additional response activities may be necessary to protect human health and the environment. If EPA determines that additional response activities are necessary, EPA may require Respondents to submit a work plan for additional response activities. EPA may also require Respondents to modify any plan, design, or other deliverable required by this Order, including any approved modifications.

58. Not later than thirty (30) days after receiving EPA's notice that additional response activities are required pursuant to this Section, Respondents shall submit a work plan for the response activities to EPA for review and approval. Upon approval by EPA, the work plan is incorporated into this Order as a requirement of this Order and shall be an enforceable part of this Order. Upon approval of the work plan by EPA, Respondents shall implement the work plan according to the standards, specifications, and schedule in the approved work plan. Respondents shall notify EPA of their intent to perform such additional response activities within seven (7) days after receipt of EPA's request for additional response activities.

XIII. ENDANGERMENT AND EMERGENCY RESPONSE

59. In the event of any action or occurrence during the performance of the work which causes or threatens to cause a release of a hazardous substance or which may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize the threat, and shall immediately notify EPA's Remedial Project Manager (RPM) or, if the RPM is unavailable, EPA's Alternate RPM. If neither of these persons is available Respondents shall notify the EPA Region 7, Emergency Response/Preparedness at (913) 551-7016 or Emergency Spill Line at (913) 281-0991. Respondents shall take such action in consultation with EPA's RPM and in accordance with all applicable provisions of this Order, including but not limited to the Health and Safety Plan and the Contingency Plan. In the event that Respondents fail to take appropriate response action as required by this Section, and EPA takes that action instead, Respondents shall reimburse EPA for all costs of the response action not inconsistent with the NCP. Respondents shall pay the response costs in the manner described in Section XXIV of this Order, within thirty (30) days of Respondent's receipt of demand for payment and a cost summary of the costs incurred.

60. Nothing in the preceding paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment

or to prevent, abate, or minimize an actual or threatened release of hazardous substance on, at, or from the Site.

XIV. EPA REVIEW OF SUBMISSIONS

61. After review of any deliverable, plan, report or other item which is required to be submitted for review and approval pursuant to this Order, EPA may: (a) approve the submission; (b) approve the submission with modifications; (c) disapprove the submission and direct Respondents to re-submit the document after incorporating EPA's comments; or (d) disapprove the submission and assume responsibility for performing all of any part of the response action. As used in this Order, the terms "approval by EPA," "EPA approval," or a similar term means the action described in paragraph (a) or (b) of this paragraph.

62. In the event of approval or approval with modifications by EPA, Respondents shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA.

63. Upon receipt of a notice of disapproval or a request for a modification, Respondents shall, within twenty-one (21) days or such longer time as specified by EPA in its notice of disapproval or request for modification, correct the deficiencies and resubmit the plan, report, or other item for approval. Notwithstanding the notice of disapproval, or approval with modifications, Respondents shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.

64. If any submission is not approved by EPA, Respondents shall be deemed to be in violation of this Order.

XV. PROGRESS REPORTS

65. In addition to the other deliverables set forth in this Order, Respondents shall provide monthly progress reports to EPA with respect to actions and activities undertaken pursuant to this Order. The progress reports shall be submitted on or before the first day of each month following the effective date of this Order. Respondents' obligation to submit progress reports continues until EPA gives Respondents written notice under paragraph 53. At a minimum these progress reports shall: (1) describe the actions which have been taken to comply with this Order during the prior month; (2) include all results of sampling and tests and all other data received by Respondents and not previously submitted to EPA; (3) describe all work planned for the next thirty (30) days with schedules relating such work to the overall project schedule for RD/RA completion; and (4) describe all problems encountered and any anticipated problems, and actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

XVI. QUALITY ASSURANCE, SAMPLING AND DATA ANALYSIS

66. Respondents shall use the quality assurance, quality control, and chain of custody procedures described in the "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001) and "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA 600/R-98/018, February 1998), and any amendments to these documents, while conducting all sample collection and analysis activities required herein by any plan. To provide quality assurance and maintain quality control, Respondents shall:

a. Use only laboratories which have a documented quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995) and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) to meet the quality system requirements. QAMS-005/80.

b. Ensure that the laboratory used by the Respondents for analyses, performs according to a method or methods deemed satisfactory to EPA and submits all protocols to be used for analyses to EPA at least fourteen (14) days before beginning analysis.

c. Ensure that EPA personnel and EPA's authorized representatives are allowed access to the laboratory and personnel utilized by the Respondents for analyses.

67. Respondents shall notify EPA not less than twenty-eight (28) days in advance of any sample collection activity. At the request of EPA, Respondents shall allow split or duplicate samples to be taken by EPA or its authorized representatives, of any samples collected by Respondents with regard to the Site or pursuant to the implementation of this Order. In addition, EPA shall have the right to take any additional samples that EPA deems necessary.

XVII. COMPLIANCE WITH APPLICABLE LAWS

68. All activities by Respondents pursuant to this Order shall be performed in accordance with the requirements of all Federal and state laws and regulations. EPA has determined that the activities contemplated by this Order are consistent with the National Contingency Plan (NCP).

69. Except as provided in section 121(e) of CERCLA and the NCP, no permit shall be required for any portion of the Work conducted entirely on-Site. Where any portion of the Work requires a Federal or state permit or approval, Respondents shall submit timely applications and take all other actions necessary to obtain and to comply with all such permits or approvals.

70. This Order is not, and shall not be construed to be, a permit issued pursuant to any Federal or state statute or regulation.

71. All materials removed from the Site shall be disposed of or treated at a facility approved by EPA's RPM and in accordance with section 121(d)(3) of CERCLA, 42 U.S.C. 9621(d)(3); with the U.S. EPA "Revised Off-Site policy," OSWER Directive 9834.11, November 13, 1987, Final Rule, 58 Fed. Reg. 49200 (September 22, 1993), codified at 40 C.F.R. Section 300.440; and, with all other applicable Federal, state, and local requirements.

XVIII. REMEDIAL PROJECT MANAGER

72. All communications, whether written or oral, from Respondents to EPA shall be directed to EPA's Remedial Project Manager or Alternate Remedial Project Manager. Respondents shall submit to EPA three copies of all documents, including plans, reports, and other correspondence, which are developed pursuant to this Order, and shall send these documents by overnight mail.

EPA's Remedial Project Manager is:

Mark Doolan
EPA Project Coordinator
United States Environmental Protection Agency
Region 7
901 North Fifth Street
Kansas City, KS 66101
Telephone: (913) 551-7169

EPA's Alternate Remedial Project Manager is:

Gene Gunn
EPA Project Coordinator
United States Environmental Protection Agency
Region 7
901 North Fifth Street
Kansas City, KS 66101
Telephone: (913) 551-8887

73. EPA has the unreviewable right to change its Remedial Project Manager or Alternate Remedial Project Manager. If EPA changes its Remedial Project Manager or Alternate Remedial Project Manager, EPA will inform Respondents in writing of the name, address, and telephone number of the new Remedial Project Manager or Alternate Remedial Project Manager.

74. EPA's RPM and Alternate RPM shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. EPA's RPM or Alternate RPM shall have authority, consistent with the National Contingency Plan, to halt any work required by this Order, and to take any necessary response action.

75. Within ten (10) days after the effective date of this Order, Respondents shall designate a Project Coordinator and shall submit the name, address, and telephone number of the Project Coordinator to EPA for review and approval. Respondents' Project Coordinator shall be responsible for overseeing Respondents' implementation of this Order. If Respondents wish to change his/her Project Coordinator, Respondents shall provide written notice to EPA, five (5) days prior to changing the Project Coordinator, of the name and qualifications of the new Project Coordinator. Respondents selection of a Project Coordinator shall be subject to EPA approval.

XIX. ACCESS TO SITE NOT OWNED BY RESPONDENTS

76. If the Site, the off-Site area that is to be used for access, property where documents required to be prepared or maintained by this Order are located, or other property subject to or affected by the clean up, is owned in whole or in part by parties other than those bound by this Order, Respondents will obtain, or use their best efforts to obtain, site access agreements from the present owner(s) within thirty (30) days of the effective date of this Order. Such agreements shall provide access for EPA, its contractors and oversight officials, the state and its contractors, and Respondents or Respondents' authorized representatives and contractors, and such agreements shall specify that Respondent is not EPA's representative with respect to liability associated with Site activities. Respondents shall save and hold harmless the United States and its officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action or other costs incurred by the United States including but not limited to attorneys fees and other expenses of litigation and settlement arising from or on account of acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order, including any claims arising from any designation of Respondents as EPA's authorized representative(s) under section 104(e) of CERCLA. Copies of such agreements shall be provided to EPA prior to Respondents' initiation of field activities. Respondents' best efforts shall include providing reasonable compensation to any off-Site property owner. If access agreements are not obtained within the time referenced above, Respondents shall immediately notify EPA of its failure to obtain access. Subject to the United States' non-reviewable discretion, EPA may use its legal authorities to obtain access for the Respondents, may perform those response actions with EPA contractors at the property in question, or may terminate the Order if Respondents cannot obtain access agreements. If EPA performs those tasks or activities with contractors and does not terminate the Order, Respondents shall perform all other activities not requiring access to that property, and shall reimburse EPA, pursuant to Section XXIV of this Order, for all costs incurred in performing such activities. Respondents shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables. Respondents shall reimburse EPA, pursuant to Section XXIV of this Order, for all response costs (including attorney fees) incurred by the United States to obtain access for Respondents.

XX. SITE ACCESS AND DATA/DOCUMENT AVAILABILITY

77. Respondents shall allow EPA and its authorized representatives and contractors to enter and freely move about all property owned by Respondents located on or off Site subject to or affected

by the Work under this Order or where documents required to be prepared or maintained by this Order are located, for the purposes of inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the Site or Respondents and its representatives or contractors pursuant to this Order; reviewing the progress of the Respondents in carrying out the terms of this Order; conducting tests as EPA or its authorized representatives or contractors deem necessary; using a camera, sound recording device or other documentary type equipment; and verifying the data submitted to EPA by Respondents. Respondents shall allow EPA and its authorized representatives to enter any properties owned by Respondent at the Site, to inspect and copy all records, files, photographs, documents, sampling and monitoring data, and other writings related to work undertaken in carrying out this Order. Nothing herein shall be interpreted as limiting or affecting EPA's right of entry or inspection authority under Federal law.

78. Respondents may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this Order under 40 C.F.R. 2.203, provided such claim is not inconsistent with section 104(e)(7) of CERCLA, 42 U.S.C. 9604(e)(7) or other provisions of law. This claim shall be asserted in the manner described by 40 C.F.R. 2.203(b) and substantiated by Respondents at the time the claim is made. Information determined to be confidential by EPA will be given to protection specified in 40 C.F.R. Part 2. If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA or the state without further notice to the Respondents. Respondents shall not assert confidentiality claims with respect to any data related to Site conditions, sampling, or monitoring.

79. Respondents shall maintain for the period during which this Order is in effect, an index of documents that Respondents claims contain confidential business information. The index shall contain, for each document, the date, author, addressee, and subject of the document. Upon written request from EPA, Respondents shall submit a copy of the index to EPA.

XXI. RECORD PRESERVATION

80. Respondents shall provide to EPA upon request, copies of all documents and information within their possession and/or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Order, 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 related to the Work. Respondents shall also make available to EPA for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

81. Until ten (10) years after EPA provides notice pursuant to paragraph 53, each Respondent shall preserve and retain all records and documents in its possession or control, including the documents in the possession or control of their contractors and agents on and after the effective date of this Order that relate in any manner to the Site. At the conclusion of this document retention period, Respondents shall notify the United States at least ninety (90) calendar days prior

to the destruction of any such records or documents, and upon request by the United States, Respondents shall deliver any such records or documents to EPA.

82. Until ten (10) years after EPA provides notice pursuant to paragraph 53 of this Order, Respondents shall preserve, and shall instruct their contractors and agents to preserve, all documents, records, and information of whatever kind, nature or description relating to the performance of the Work. Upon the conclusion of this document retention period, Respondents shall notify the United States at least ninety (90) days prior to the destruction of any such records, documents or information, and, upon request of the United States, Respondents shall deliver all such documents, records, and information to EPA.

83. Within ten (10) days after the effective date of this Order, Respondents shall submit a written certification to EPA's RPM that they have not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information relating to their potential liability with regard to the Site since notification of potential liability by the United States or the State or the filing of suit against it regarding the Site. Respondents shall not dispose of any such documents without prior approval by EPA. Respondents shall, upon EPA's request and at no cost to EPA, deliver the documents or copies of the documents to EPA.

XXII. DELAY IN PERFORMANCE

84. Any delay in performance of this Order that, in EPA's judgment, is not properly justified by Respondents under the terms of this paragraph shall be considered a violation of this Order. Any delay in performance of this Order shall not affect Respondents obligations to fully perform all obligations under the terms and conditions of this Order.

85. Respondents shall notify EPA of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone to EPA's RPM or Alternate RPM within forty-eight (48) hours after Respondents first knew or should have known that a delay might occur. Respondents shall adopt all reasonable measures to avoid or minimize any such delay. Within five (5) business days after notifying EPA by telephone, Respondents shall provide written notification fully describing the nature of the delay any justification for delay, any reason why Respondents should not be held strictly accountable for failing to comply with any relevant requirements of this Order, the measures planned and taken to minimize the delay, and a schedule for implementing the measures that will be taken to mitigate the effect of the delay. Increased costs or expenses associated with implementation of the activities called for in this Order is not a justification for any delay in performance.

XXIII. ASSURANCE OF ABILITY TO COMPLETE WORK

86. Respondents shall demonstrate their ability to complete the Work required by this Order and to pay all claims that arise from the performance of the Work by obtaining and presenting to EPA within thirty (30) days after approval of the RD/RA Work Plan by providing to EPA one or more of following assurances to allow EPA to determine that Respondents have sufficient assets

available to perform the Work. Respondents shall demonstrate financial assurance in the amount of \$4,000,000, the estimated cost for the remedial design and remedial action for their Parcels and Associated Tributaries based on cost estimates in the Record of Decision for the Site. The assurances shall be in the form satisfactory to EPA:

a. A surety bond unconditionally guaranteeing payment or performance of the Work that is issued by a surety company among those listed as acceptable sureties on Federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. One or more irrevocable letters of credit, payable to or at the direction of EPA, that is issued by one or more financial institution(s) (i) that has the authority to issue letters of credit and (ii) whose letter-of-credit operations are regulated and examined by a U.S. Federal or State agency;

c. A demonstration by the Respondents that they meet the financial test criteria of 40 C.F.R. § 264.143(f) with respect to the Performance Guarantee Amount, provided that all other requirements of 40 C.F.R. § 264.143(f) are satisfied; or

d. A third party written guarantee to fund or perform the Work executed in favor of EPA by one or more of the following: (i) a direct or indirect parent company of the Respondents, or (ii) a company that has a "substantial business relationship" (as defined in 40 C.F.R. § 264.141(h)) with the Respondents; provided, however, that any company providing such a guarantee must demonstrate to the satisfaction of EPA that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the Performance Guarantee Amount that it proposes to guarantee hereunder.

e. If Respondents seek to demonstrate ability to complete the remedial action by means of internal financial information or by guarantee of a third party, they shall re-submit such information annually, on the anniversary of the effective date of this Order. If EPA determines that such financial information is inadequate, Respondents shall, within thirty (30) days after receipt of EPA's notice of determination, obtain and present to EPA for approval a surety bond or irrevocable letter of credit for financial assurance as listed above.

87. At least seven (7) days prior to commencing any work at the Site pursuant to this Order, Respondents shall submit to EPA a certification that Respondents or their contractors and subcontractors have adequate insurance coverage or have indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondents pursuant to this Order. Respondents shall ensure that such insurance or indemnification is maintained for the duration of the Work required by this Order.

XXIV. REIMBURSEMENT OF RESPONSE COSTS

88. Respondents shall reimburse EPA, upon written demand, for all response costs incurred by the United States in overseeing Respondents' implementation of the requirements of this Order or in performing any response action which Respondents fail to perform in compliance with this Order. EPA may submit to Respondents on a periodic basis an accounting of all response costs incurred by the United States with respect to this Order. EPA's certified Agency Financial Management System summary data or such other summary as certified by EPA, shall serve as basis for payment demands.

89. Respondents shall, within thirty (30) days of receipt of each EPA accounting, remit a certified or cashier's check for the amount of those costs. Interest shall accrue from the later of the date that payment of a specified amount is demanded in writing or the date of the expenditure. The interest rate is the rate established by the Department of the Treasury pursuant to 31 U.S.C. 3717 and 4 C.F.R. Section 102.13.

90. Checks shall be made payable to the Hazardous Substances Superfund and shall include the name of the Site, Site identification number 0736, and the title of this Order. Checks shall be forwarded to:

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

91. Respondents shall send copies of each transmittal letter and check to the EPA's RPM and to the Regional Financial Management Officer:

United States Environmental Protection Agency
Superfund Accounting
Region 7
901 North Fifth Street
Kansas City, KS 66101

XXV. UNITED STATES NOT LIABLE

92. The United States, by issuance of this Order, assumes no liability for any injuries or damages to persons or property resulting from acts or omissions by Respondents, or their directors, officers, employees, agents, representatives, successors, assigns, contractors, or consultants in carrying out

any action or activity pursuant to this Order. Neither EPA nor the United States may be deemed to be a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors, assigns, contractors, or consultants in carrying out any action or activity pursuant to this Order.

XXVI. ENFORCEMENT AND RESERVATIONS

93. EPA reserves the right to bring an action against Respondents under section 107 of CERCLA, 42 U.S.C. Section 9607, for recovery of any response costs incurred by the United States related to this Order and not reimbursed by Respondents. This reservation shall include but not be limited to past costs, direct costs, indirect costs, the costs of oversight, the costs of compiling the cost documentation to support oversight cost demand, as well as accrued interest as provided in section 107(a) of CERCLA.

94. Notwithstanding any other provision of this Order, at any time during the response action, EPA may perform its own studies, complete the response action (or any portion of the response action) as provided in CERCLA and the NCP, and seek reimbursement from Respondents for their costs, or seek any other appropriate relief.

95. Nothing in this Order shall preclude EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, and/or additional remedial or removal actions as EPA may deem necessary, or from requiring Respondent(s) in the future to perform additional activities pursuant to CERCLA, 42 U.S.C. Section 9606(a), et seq., or any other applicable law. Respondents shall be liable under CERCLA section 107(a), 42 U.S.C. Section 9607(a), for the costs of any such additional actions.

96. Notwithstanding any provision of this Order, the United States hereby retains all of its information gathering, inspection and enforcement authorities and rights under CERCLA, RCRA and any other applicable statutes or regulations.

97. Respondents shall be subject to civil penalties under section 106(b) of CERCLA, 42 U.S.C. 9606(b), of not more than \$32,500 for each day in which Respondents willfully violate, or fail or refuse to comply with this Order without sufficient cause. In addition, failure to properly provide response action under this Order, or any portion hereof, without sufficient cause, may result in liability under section 107(c)(3) of CERCLA, 42 U.S.C. 9607(c)(3), for punitive damages in an amount at least equal to, and not more than three times the amount of any costs incurred by the Fund as a result of such failure to take proper action.

98. Nothing in this Order shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person for any liability it may have arising out of or relating in any way to the Site.

99. If a court issues an order that invalidates any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated by the court's order.

XXVII. ADMINISTRATIVE RECORD

100. Upon request by EPA, Respondents must submit to EPA all documents related to the selection of the response action for possible inclusion in the administrative record file.

XXVIII. EFFECTIVE DATE AND COMPUTATION OF TIME

101. This Order shall be effective thirty (30) days after the Order is signed by the Director, Superfund Division. All times for performance of ordered activities shall be calculated from this effective date.

XXIX. OPPORTUNITY TO CONFER

102. Respondents may, within ten (10) days after the date this Order is signed, request a conference with EPA to discuss this Order. If requested, the conference shall occur at EPA Region 7, located at 901 N. 5th Street, Kansas City, Kansas 66101.

103. The purpose and scope of the conference shall be limited to issues involving the implementation of the response actions required by this Order and the extent to which Respondents intend to comply with this Order. This conference is not an evidentiary hearing, and does not constitute a proceeding to challenge this Order. It does not give Respondents a right to seek review of this Order, or to seek resolution of potential liability, and no official stenographic record of the conference will be made. At any conference held pursuant to Respondents' request, Respondents may appear in person or by an attorney or other representative.

104. Requests for a conference must be by telephone followed by written confirmation mailed that day to:

Mark Doolan
EPA Project Coordinator
United States Environmental Protection Agency, Region 7
901 North Fifth Street
Kansas City, KS 66101
Telephone: (913) 551-7169

So Ordered, this 25 day of Nov, 2008.

By: _____


Cecilia Tapia

Director, Superfund Division

U.S. Environmental Protection Agency, Region 7

CERTIFICATE OF SERVICE

I certify that on the date noted below I hand delivered the original and one true copy of this Administrative Settlement Agreement and Order on Consent for Removal Action to the Regional Hearing Clerk, United States Environmental Protection Agency, 901 North Fifth Street, Kansas City, Kansas 66101.

I further certify that on the date noted below I sent a copy of the foregoing Order for Compliance by first class certified mail, return receipt requested, to:

Colin H. Tucker
Attorney at Law
Rhodes, Hieronymus, Jones, Tucker, Gable, P.L.L.C
ONEOK Plaza
100 West 5th St
Tulsa, OK 74103-4287

NOV 25 2008

Date

Kimberly Kyff
Signature