

US EPA ARCHIVE DOCUMENT

In the Matter of:
Herculaneum Lead Smelter Site
Docket No. CERCLA-07-2002-0038

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101**

In the Matter of:)
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Herculaneum Lead Smelter Site)
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Herculaneum, Missouri)
)
)
THE DOE RUN RESOURCES CORPORATION)
)
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Respondent.)
)
)
Proceedings under Section)
106 of the)
Comprehensive)
Environmental Response,)
Compensation, and Liability)
Act of 1980, 42 U.S.C. § 9606)
_____)

Docket No. 07-2002-0038

ADMINISTRATIVE ORDER

ON CONSENT

**ADMINISTRATIVE ORDER ON CONSENT
FOR RESPONSE ACTION**

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I. INTRODUCTION

1. This Administrative Order on Consent for Response Action ("Consent Order" or "Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and The Doe Run Resources Corporation ("Respondent"). This Consent Order provides for the performance of response actions pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. § 9606(a) ("CERCLA"), at the Herculaneum Lead Smelter Site located in Herculaneum, Missouri.

2. Respondent is a New York corporation in good standing doing business in Missouri. This Consent Order concerns the lead smelter owned and operated by Respondent which is located at 881 Main Street in Herculaneum, Jefferson County, Missouri (hereinafter referred to as the "facility"), and all areas in the vicinity of the facility that have been or potentially are impacted by releases of lead as a result of the facility's operations.

3. Respondent's activities related to the operation of the smelter, including Respondent's transportation and materials handling activities, have released lead onto the streets and the soils and into the interiors of residences in the Herculaneum community.

4. In May 2001, EPA, the Missouri Department of Natural Resources ("MDNR") and Doe Run voluntarily entered into an Administrative Order on Consent ("May 2001 Consent Order") concerning the Doe Run lead smelter in Herculaneum, Missouri and areas in the vicinity of the smelter that have been impacted by the smelter operation. The May 2001 Consent Order requires Respondent to conduct certain response actions to abate an imminent and substantial

endangerment to the public health, welfare, or the environment that may be presented by the actual or threatened release of hazardous substances at or from the facility.

5. Since issuance of the May 2001 Consent Order, EPA has determined, based on new information, that the existing schedule for a portion of the soil cleanup actions required by the May 2001 Consent Order needs to be expedited in order to protect human health and the environment. New information also shows that certain additional response actions not required by the May 2001 Consent Order are necessary.

6. This Order requires Respondent to take actions to minimize further releases of lead into the environment from the facility's transportation and materials handling activities. This Order also requires Respondent to perform interior dust cleanups at certain residences in the Herculaneum community, and to perform an accelerated cleanup of certain contaminated soils in the community. The purpose of these actions is to abate an imminent and substantial endangerment to the public health, welfare, or the environment that may be presented by the actual or threatened release of hazardous substances at or from the facility.

II. JURISDICTION

7. This Consent Order is issued pursuant to the authority vested in the President of the United States by Section 106(a) of CERCLA, 42 U.S.C. § 606(a). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (1987), and was further delegated to the Regional Administrators on September 13, 1987, by

EPA Delegation No. 14-14-C. This authority was subsequently delegated to the Director, Superfund Division, by EPA Region VII Delegation No. R7-14-14C, dated January 1, 1995.

8. Respondent's participation in this Consent Order shall not constitute or be construed as an admission of liability or of the findings or determinations contained in this Consent Order. Respondent agrees to comply with and be bound by the terms of this Consent Order. Respondent consents to and agrees not to contest EPA's authority or jurisdiction to issue or to enforce this Consent Order. Respondent further agrees not to contest the basis or validity of this Consent Order or any of its terms.

9. EPA has notified the State of Missouri of the issuance of this Consent Order.

III. DEFINITIONS

10. Unless otherwise expressly provided herein, terms used in this Consent 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 Consent Order or in the documents attached to this Consent Order or incorporated by reference into this Consent Order, the following definitions shall apply:

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

"Consent Order" shall mean this Administrative Order on Consent for Response Action and all attachments hereto. In the event of conflict between this Consent Order and any

provision of any other agreement, order or writing, the terms and conditions of this Consent Order shall control.

"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 Consent 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.

"Doe Run facility" or "facility" shall mean the lead smelter located at 881 Main Street in Herculaneum, Missouri.

"EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Hazardous Substances" shall have the same meaning as in Section 101(14) of CERCLA, 42 U.S.C. § 9604(14).

"Interest" shall mean interest at the current rate specified for interest on investments of the Hazardous Substance Superfund, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). "Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

"MDNR" shall mean the Missouri Department of Natural Resources and any successor departments or agencies of the State.

"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 et seq., as amended.

"Oversight Costs" shall mean all direct and indirect costs incurred by EPA in connection with this Consent Order, including, but not limited to, time and travel costs of EPA personnel and associated indirect costs; contractor costs; interagency agreement costs; compliance monitoring including the collection and analysis of split samples, Site visits, discussions regarding disputes that may arise as a result of this Consent Order, review and approval or disapproval of reports and costs of performing any of Respondent's tasks; costs incurred by EPA in the process of assisting Respondent to gain access as described in Section VIII (Required Actions); other costs incurred in implementing, overseeing, or enforcing this Consent Order; and enforcement costs.

"Paragraph" shall mean a portion of this Consent Order identified by an Arabic numeral, a letter of the alphabet or a lower case Roman numeral.

"Parties" shall mean the United States and the Respondent.

"RCRA" shall mean the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments, 42 U.S.C. § 6901 et seq.

"Respondent" shall mean The Doe Run Resources Corporation.

"Section" shall mean a portion of this Consent Order identified by a Roman numeral and includes one or more paragraphs, unless used to refer to a statutory or regulatory section.

"Site" shall have the same meaning as facility in Section 101(9) of CERCLA 42 U.S.C. § 9601(9), and for purposes of this Consent Order shall reference the locations where hazardous substances from operations at the Doe Run lead smelter have come to be located.

"United States" shall mean the United States of America, and any and all agencies and instrumentalities thereof.

"Work" shall mean all activities Respondent is required to perform under this Order, except the record retention requirements, Section XI of this Order.

IV. PARTIES BOUND

11. The terms of this Consent Order shall apply to and be binding upon Respondent, its agents, successors and assigns, and upon all persons, contractors, and consultants acting under or for Respondent. The signatories to this Consent Order certify that they are authorized to execute and legally bind the parties they represent to this Consent Order.

12. Any change in the ownership, corporate or partnership status of Respondent or of property currently owned by Respondent at the Site, shall not alter any of Respondent's responsibilities under this Consent Order. Respondent shall provide a copy of this Consent

Order to any subsequent owners or successors thereof before ownership rights or stock or assets in a corporate acquisition are transferred.

13. Respondent shall provide a copy of this Consent Order, within ten (10) working days of the effective date of this Consent Order, to its contractors, subcontractors, laboratories, consultants, and representatives retained or employed to conduct any Work performed under this Consent Order. Respondent shall condition any contracts for Work to be performed under this Consent Order upon satisfactory compliance with this Consent Order. Respondent is responsible for ensuring that its contractors, subcontractors, laboratories, consultants, and employees comply with this Consent Order.

V. FINDINGS OF FACT

14. The Doe Run primary lead smelter in Herculaneum, Missouri has been operating for over 100 years and is the largest smelter of its kind in the United States. The smelter is an active lead smelting facility, currently owned and operated by The Doe Run Resources Corporation ("Doe Run" or "Respondent"), a New York Corporation in good standing doing business in Missouri.

15. The Doe Run lead smelter facility is approximately 52 acres in size and is located at 881 Main Street in Herculaneum, Jefferson County, Missouri. The facility is bordered on the east by the Mississippi River, on the west and north-northwest by residential areas, and on the south-southwest by a slag pile.

16. In May 2001, EPA, MDNR, and Doe Run voluntarily entered into an Administrative Order on Consent ("May 2001 Order") concerning the Doe Run lead smelter in Herculaneum, Missouri and areas in the vicinity of the smelter that have been impacted by the smelter operation. The May 2001 Consent Order requires Respondent to conduct certain response actions, including cleanup of certain contaminated soils in the community. The May 2001 Consent Order does not provide for cleanup of interior dust contamination, nor does it address Respondent's transportation and materials handling activities.

17. As part of its operations, the Doe Run smelter receives lead concentrate from mining and milling operations located in the Missouri counties of Iron, Reynolds, and Washington. For the last two or three years, the primary mode of transporting lead concentrate to Doe Run's smelter has been by trucks.

18. The trucks carrying ore concentrate to the smelter travel on public streets through the City of Herculaneum on their way to and from the smelter. The primary haul route through the City of Herculaneum used by trucks traveling to and from the smelter includes portions of Station Street, Brown Street, and Joachim Avenue. A secondary haul route is also used, which includes portions of Main Street and Joachim Avenue. Numerous residences are located along the haul route.

19. On August 21, 2001, MDNR personnel responded to citizens' complaints about dust coming off of trucks on their way to and from the smelter and dust on the haul route streets in Herculaneum. MDNR personnel collected a sample of road dust along the primary haul route, at

the northwest corner of Station and Broad Street in Herculaneum. The sample of road dust was dark grey and metallic in appearance. Laboratory analyses of the sample showed 300,000 mg/kg of lead.

20. MDNR personnel observed that road dust had collected in long narrow piles along the street curbs and shoulders.

21. Limited sampling performed by EPA in late August and early September confirmed the existence of high levels of lead on the streets of Herculaneum used by Doe Run as haul routes, and also showed that residential yards and parks along the haul routes also contained high levels of lead.

22. On September 17, 2001, EPA notified Doe Run by letter that the existing schedule contained in the May 2001 Consent Order for characterization of lead levels in residential soils needed to be expedited. In that letter, EPA notified Doe Run that within 60 days, soil sampling needed to be completed at approximately 539 residences in the vicinity of the smelter. EPA requested that Doe Run perform the soil sampling as Additional Work under the May 2001 Consent Order, as provided for in Paragraph 135 of the May 2001 Consent Order.

23. On September 24, 2001, Doe Run notified EPA that it would perform the soil sampling work that EPA had requested in the September 17th letter.

24. Doe Run completed the soil sampling effort in mid-November 2001. EPA has subsequently provided the results of the soil sampling to each resident whose property was sampled. The results show that a significant number of the residences sampled have children

under age six at the residence and lead levels in soil greater than 400 parts per million. Some of the residences have lead levels in soil greater than 10,000 parts per million, primarily in areas directly adjacent to the haul routes. A significant number of the residences have lead levels in soil between 2,500 parts per million and 10,000 parts per million.

25. During October and November 2001, EPA collected interior dust samples from residences in Herculaneum. These samples were generally collected at residences where lead levels in soil exceed 10,000 parts per million and where children reside who have been identified by the Missouri Department of Health as having elevated blood lead levels. Analyses of the samples shows that significantly elevated levels of lead are present in interior dust in such residences.

26. Doe Run, the Jefferson County Health Department, and the Missouri Department of Health have documented elevated blood-lead levels in certain children who live in the vicinity of the smelter.

27. The Agency for Toxic Substances and Disease Registry of the United States Department of Health and Human Services (ATSDR) has concluded that exposure to lead can have adverse health effects on multiple human organ systems. Exposure to lead can affect adults, but children less than six years old, and unborn children whose mothers are exposed to lead, are especially vulnerable to the effects of lead poisoning. In children, the ATSDR has concluded that lead can cause adverse effects on the central nervous system. Medical literature has reported an association between lead exposure and reduced intelligence quotient scores. Humans may be

exposed to lead through ingestion of contaminated soils and dust or by inhalation of lead particles in the air. Lead has many toxic effects on human health and is a cumulative toxicant. A significant amount of lead that enters the body is stored in the bone for many years and can be considered an irreversible health effect.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

EPA hereby makes the following conclusions of law and determinations:

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

29. The lead found at the Site, as identified in the Findings of Fact above, is a "hazardous substance" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

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

31. Respondent is liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), as the Respondent is the owner and operator of the Facility at the time of disposal of the hazardous substance at the Facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2), 42 U.S.C. § 9607(a)(2).

32. 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 Sections 101(22) of CERCLA, 42 U.S.C. § 9601(22).

33. The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

34. The response actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP or CERCLA.

VII. WORK TO BE PERFORMED

Based on the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Respondent shall perform the following actions:

35. For the residences at which Doe Run recently conducted soil sampling pursuant to the Additional Work provision of May 2001 Consent Order, and which also fall into one of the categories listed below, the cleanup schedule is as follows:

<u>Category</u>	<u>Time frame for yard soil replacement</u>
Homes with children at or under 72 months old with blood lead level in excess of 10 ug/dl and soil lead level exceeding 400 ppm	Within 30 days of being notified by EPA of location of residence
Child care providers with soil lead levels exceeding 400 ppm lead	Within 30 days of being notified by EPA of location of residence

Homes with resident children at or under 72 months old and soil lead level exceeding 400 ppm	Within 4 months of effective date of this Order
Homes, parks, playgrounds, and elementary schools with soil lead level exceeding 10,000 ppm	Within 6 months of effective date of this Order
Homes, parks, playgrounds, and schools with soil lead levels between 2,500 ppm lead and 10,000 ppm lead	Within 12 months of effective date of this Order

36. When the Community Soil Cleanup Plan is approved by EPA pursuant to the May 2001 Consent Order, all soil cleanup work performed by Respondent pursuant to this Order shall be performed in accordance with that plan. Prior to approval of the Community Soil Cleanup Plan, Respondent shall conduct soil cleanup work in accordance with the procedures Respondent has been following in conducting cleanups since September 17, 2001, under the Additional Work provision of the May 2001 Consent Order.

37. Soil cleanup work under this Order shall not include vacant lots. Where vacant lots have soil contamination levels greater than 2500 ppm, Respondent shall provide written notice to residents at properties adjacent to and behind vacant lots that the vacant lots have contaminated soils and that contact with such soils should be avoided, especially by young children.

38. Soil cleanup work under this Order shall not include lots owned by Doe Run that are within .4 miles of the smelter and where children do not reside. Within 30 days of the effective date of this Order, Respondent shall conduct a survey of all residences owned by Doe Run to confirm that children younger than 72 months or pregnant women do not currently reside at any of the residences owned by Doe Run. If there are children or pregnant women living at any of these residences, Doe Run shall perform a soil cleanup at the residence within 60 days of the

effective date of the Order. Doe Run shall provide EPA a written report with the results of the survey within 60 days of the effective date of this Order, listing the addresses of all residences owned by Doe Run and certifying that as of the date of the survey that either a soil cleanup has been completed at any residence where children reside, or that there are no children younger than 72 months or pregnant women residing at those addresses. Doe Run shall also establish mechanisms and procedures to ensure that children younger than 72 months or pregnant women do not become residents of Doe Run-owned residences prior to the time that soil cleanup is performed at such residences. Doe Run shall submit its proposed procedures to EPA for review and approval within 90 days of the effective date of this Order. If at any time during the period in which this Order is effective, Doe Run becomes aware that a child younger than 72 months has become a resident of a Doe Run-owned home, Doe Run shall complete a soil cleanup of that home within 30 days. In addition, Doe Run shall perform quarterly interior dust cleaning at all occupied Doe Run-owned residences where soil cleanup has not been performed, commencing 90 days after the effective date of this agreement. Such interior dust cleanups shall be performed in accordance with the procedures set forth in paragraphs 39 and 40 herein.

39. Doe Run shall perform an interior dust lead cleanup at all residences where yard soil replacement has been or is performed pursuant to this Order or the May 2001 Consent Order. For residences where soil cleanup is initiated after the effective date of this Order, interior cleanup at each residence shall be initiated within 20 days of completion of yard soil replacement at that residence. For residences where soil cleanup was completed pursuant to the May 2001 Consent

Order prior to the effective date of this Order, interior cleanup shall be initiated within 60 days of EPA approval of the Interior Dust Cleanup Plan, as provided for in Paragraph 40 below. Doe Run shall work with each residence requiring indoor dust clean up to schedule the indoor dust cleanup at a time which minimizes inconvenience for the residents.

40. When conducting the interior dust lead cleanups, Respondent shall follow the general dust cleanup procedures attached to this Order as Appendix A. Doe Run shall develop an Interior Dust Cleanup Plan and submit it to EPA for review and approval within 30 days of the effective date of this Order. The plan shall be developed in accordance with Appendix A and shall provide specific descriptions and details of all aspects of interior dust cleanups, including, but not be limited to: worker qualifications and credentials; cleaning equipment and methods; plans and procedures for addressing different areas within residences, such as walls, floors, carpets, attics, furniture, draperies, and ductwork; and cleanup confirmation sampling in accordance with Subpart D of 40 CFR Part 745. An interior dust cleanup shall not be considered complete until indoor dust concentration wipe sample results confirm that lead dust concentrations on floors are below 40 micrograms per square foot and lead dust concentrations on interior window sills are below 250 micrograms per square foot. For each residence where Doe Run performs interior dust cleanup, Doe Run shall provide cleanup confirmation sampling results to the residence, EPA, and MDNR within 20 days of completion of the interior dust cleanup. In conjunction with the confirmation sampling, Respondent shall conduct a lead source survey.

41. Within 30 days of the effective date of this Order, Respondent shall submit to EPA for review and approval a Smelter Transportation and Materials Handling Plan. Such plan shall describe and explain in detail practices and procedures which Respondent will implement and follow to minimize to the extent practicable, using best management practices, the release of lead to the community as a result of Respondent's transportation and materials handling activities. The plan shall address actions to prevent the release of lead from vehicles transporting materials to the Doe Run smelter, from vehicle unloading activities, from vehicles leaving the facility, and any other activities related to materials handling and transportation which may result in releases of lead. The plan shall also include an expeditious schedule for implementation. Upon approval of the Smelter Transportation and Materials Handling Plan, Respondent shall implement the plan, as approved.

42. Respondent shall notify EPA of the name and qualifications of any contractor or subcontractor retained to perform Work under this Consent Order at least ten (10) days prior to commencement of such Work.

43. Within ten (10) days after the effective date of this Consent Order, Respondent shall designate a Project Coordinator and shall submit the designated coordinator's name, address, telephone number, and qualifications to EPA. Respondent's Project Coordinator shall be responsible for administration of all the actions required of Respondent by the Consent Order. Respondent's Project Coordinator shall be present at the Site or readily available by telephone during Site Work.

44. EPA retains the right to disapprove of any, or all, of the contractors or subcontractors selected by Respondent, including the Project Coordinator, pursuant to Section IX (Submissions Requiring EPA Approval). If EPA disapproves of a selected contractor, subcontractor, or Project Coordinator, Respondent shall retain a different person, and shall notify EPA of that person's name, address, telephone number, and qualifications within fifteen (15) days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Consent Order shall constitute receipt of the same by Respondent.

45. EPA has designated Anthony Petruska as its Project Coordinator. Respondent shall direct all submissions required by this Consent Order by certified or registered mail to Mr. Petruska at the United States Environmental Protection Agency, Region VII, 901 N. 5th Street, Kansas City, Kansas 66101, (913) 551-7637.

46. EPA and Respondent shall have the right to change their designated Project Coordinators and contractors. Verbal notice of such change shall be provided to the other parties within twenty-four (24) hours of such change and written notice shall follow within five (5) days of such change. Such change by Respondent is subject to EPA approval as set forth above and in Section IX (Submissions Requiring EPA Approval).

47. During performance of the soil cleanup work required by this Order, Respondent shall implement the Health and Safety Plan prepared by Respondent pursuant to the May 2001 Consent Order. In addition, with respect to protection of the public health and safety during performance of the interior dust cleanup work required by this Consent Order, Respondent shall

include a section in the Interior Dust Cleanup Plan addressing health and safety, and shall implement the plan during the performance of the Work required by this Consent Order.

48. Respondent shall include as part of the Interior Dust Cleanup Work Plan a Quality Assurance Project Plan ("QAPP") for all interior dust cleanup verification sampling and analyses activities to be undertaken as part of this Consent Order. With respect to QA/QC procedures for soil cleanup work, Respondent shall follow the Quality Assurance Project Plan required under the May 2001 Consent Order, when it is approved. Prior to approval of the Quality Assurance Project Plan required under the May 2001 Consent Order, Respondent shall follow the QA/QC procedures it has been following in performing soil cleanups since September 17, 2001, under the Additional Work provision of the May 2001 Consent Order.

49. All sampling and analyses performed pursuant to this Consent Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures in accordance with the appropriate EPA guidances.

50. Upon request by EPA, Respondent shall have the laboratory being used by Respondent analyze samples submitted by EPA for quality assurance monitoring.

51. Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split or duplicate samples of any samples collected by Respondent while performing Work pursuant to this Consent Order. EPA shall have the right to take any additional samples that it deems necessary.

52. Respondent shall ensure that any laboratory used by Respondent for analyses performs according to a method or methods consistent with the EPA Contract Laboratory Program ("CLP") and submits all protocols to be used for analyses to EPA at least ten (10) days before beginning analyses.

53. Respondent shall submit to EPA, within twenty (20) days of receipt by Respondent, all analytical data collected in connection with this Consent Order.

54. Respondent shall submit a monthly written progress report to EPA concerning activities undertaken pursuant to this Consent Order, commencing on February 1, 2002, until EPA provides a Notice of Completion to Respondent pursuant to Section XXIV herein. These reports shall describe all significant developments during the preceding period; work performed and problems encountered; the actual Work performed, any problems encountered in completing this Work; the developments anticipated and the work scheduled during the next reporting period, including a schedule of completion for the unfinished Work from the preceding period and Work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

VIII. ACCESS TO PROPERTY AND INFORMATION

55. Respondent shall provide EPA and its representatives and contractors, and Respondent and its representatives and contractors, with access to the Site necessary for conducting or overseeing activities pursuant to this Consent Order. These individuals shall be

permitted to move freely about the Site in order to conduct all actions which EPA determines to be necessary. Such unrestricted access shall continue until such time as EPA has granted notice of completion as set forth in Section XXIV (Notice of Completion of this Consent Order).

56. Where Respondent needs access to any property not owned by Respondent in order to conduct the activities required by this Order, Respondent shall use best efforts to obtain access to such properties and shall provide such access to EPA. As used in this Section, "best efforts" shall include at least an initial in-person visit, a follow-up telephone call and a certified letter from Respondent to the present owner of the property, requesting an access agreement to permit Respondent and EPA, including its authorized representatives, access to the property to conduct the activities required under this Consent Order. Such access to property shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and state of Missouri representatives.

57. Respondent shall immediately notify EPA if, after using its best efforts, Respondent is unable to obtain a necessary access agreement. In Respondent's notification to EPA of failure to obtain access, Work Respondent shall describe and document in writing its efforts to obtain access. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response activities described herein, using such means as EPA deems appropriate, including exercising its authority pursuant to Section 104(e) of CERCLA, 42 U.S.C. 9604(e).

58. Respondent shall also provide EPA access to all records and documentation related to the conditions at the Site and the activities conducted pursuant to this Consent Order. Such

access to information shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and state of Missouri representatives.

59. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Order shall be withheld on the grounds that they are privileged.

60. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

IX. SUBMISSIONS REQUIRING EPA APPROVAL

61. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Order, EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission with modifications; (c) disapprove, in whole or in part,

the submission, directing the Respondent to resubmit the document after incorporating EPA's comments; (d) disapprove the submission and assume responsibility for performing all or any part of the response activities; or (e) any combination of the above.

62. In the event of approval or approval with modifications by EPA, pursuant to Paragraph 61, Respondent 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 pursuant to Paragraph 61, Respondent shall, within twenty (20) working days or such other time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval.

64. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 61, Respondent shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVIII (Stipulated Penalties).

65. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report, or other item in a timely and adequate manner, unless Respondent invokes the procedures of Section XVI (Dispute Resolution), and EPA's action is overturned pursuant to the Section.

66. The provisions of Section XVI (Dispute Resolution) and Section XVIII (Stipulated Penalties) shall govern the implementation of the Work, and accrual and payment of any stipulated penalties during dispute resolution. If EPA's disapproval is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was required, as provided in Section XVIII (Stipulated Penalties).

67. All plans, reports and other items required to be submitted to EPA under this Consent Order shall, upon approval by EPA, be enforceable under this Consent Order. In the event EPA approves a portion of a plan, report or other item required to be submitted to EPA under this Consent Order, the approved portion shall be enforceable under this Consent Order.

X. DEFERRAL OF OVERSIGHT COST REIMBURSEMENT

68. EPA agrees, in consideration of Respondent's current financial situation, to defer all oversight cost reimbursement payment demands for eighteen months from the effective date of this Order for the following Administrative Orders on Consent to which EPA and Respondent are parties:

<u>Name</u>	<u>Docket No.</u>
In the Matter of St Francois County Mining Area	VII-97-F-0002
In the Matter of St Francois County Mining Area	CERCLA-7-2000-0015
In the Matter of Federal Tailings Pile	VII-97-F-0009
In the Matter of Elvins Mine Tailings Site	CERCLA-7-2000-0023
In the Matter of Leadwood Mine Tailings Site	CERCLA-7-2000-0022
In the Matter of Doe Run Resources Corporation	RCRA-7-2000-0018 and CERCLA-7-2000-0029
In the Matter of Big River Mine Tailings Site	VII-94-F-0015

In the Matter of Bonne Terre Superfund Site
In the Matter of OU 1 Madison County Mine Sites

CERCLA-7-2000-0024
CERCLA-7-99-0013

69. EPA may, in its discretion, continue to provide Respondent with itemized cost summaries of oversight costs on a periodic basis during the eighteen month deferral period.

70. Notwithstanding EPA's agreement herein to defer oversight cost payment demands for eighteen months, Respondent's existing obligation to reimburse EPA for its oversight costs under each of the above-listed Consent Orders remains in full force and effect, and payment of the entire amount of such oversight costs for each order will be due upon receipt of a demand for payment from EPA at the end of the eighteen month deferment period. Respondent agrees that it will not dispute any demands for payment of oversight costs following the eighteen month deferment period on the grounds that the demand for payment is not timely.

71. Should Respondent declare any dividends to its stockholders, Respondent must, prior to payment of such dividends, first pay all EPA oversight costs which have been deferred under this Order and for which an itemized cost summary has previously been noticed to Respondent.

XI. RECORD RETENTION, DOCUMENTATION,

AND AVAILABILITY OF INFORMATION

72. Respondent shall preserve all documents and information relating to Work performed under this Consent Order, or relating to the hazardous substances found on or released from the Site, for three (3) years following completion of the Work required by this Consent Order. If, during such three year period, EPA shall request, in writing, a review of, or copies of, any such

documentation or information, Respondent shall provide the original or copies of such documents or information to EPA within fifteen (15) working days. At the end of this three year period and thirty (30) days before any document or information is destroyed, Respondent shall notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the original or true and accurate copies of such documents and information to EPA.

73. Respondent may assert a business confidentiality claim pursuant to 40 C.F.R. § 2.203(b) with respect to part or all of any information it submits to EPA pursuant to this Consent Order, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the Respondent. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth in, 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Respondent. Respondent may also assert claims of privilege, as set forth in paragraph 59 herein. EPA may, at any time, challenge claims of privilege through negotiations or otherwise as provided by law or the Federal Rules of Civil Procedure.

XII. OFF-SITE SHIPMENTS

74. Any hazardous substances, pollutants or contaminants removed off-site pursuant to this Consent Order for treatment, storage or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440, promulgated pursuant to 42 U.S.C. § 9621(d)(3).

XIII. COMPLIANCE WITH OTHER LAWS

75. All actions required pursuant to this Consent Order shall be performed in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA Section 121(e), 42 U.S.C. § 9621, and 40 C.F.R. § 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all Work required pursuant to this Consent Order shall, to the extent practicable, as determined by EPA, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental, state environmental, or facility siting laws.

XIV. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

76. If any incident, or change in Site conditions, during the activities conducted pursuant to this Consent Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, Respondent shall immediately take all appropriate action, in accordance with all applicable provisions of this Order, to abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify EPA's Project Coordinator, or, in the event of his

unavailability, shall notify the Regional Duty Officer, Emergency Planning and Response Branch, EPA Region VII, (913) 236-3778, of the incident or Site conditions. Respondent shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release.

77. In addition, in the event of any release of a hazardous substance above a reportable quantity from the Site, Respondent shall immediately notify the National Response Center at (800) 424-8802 and EPA's Project Coordinator at (913) 551-7728.

78. These requirements are in addition to the requirements set forth in the Emergency Planning and Community Right-to-know Act ("EPCRA"), 42 U.S.C. § 11001 et seq.

XV. AUTHORITY OF EPA'S PROJECT COORDINATOR

79. EPA's Project Coordinator shall be responsible for overseeing the implementation of this Consent Order. EPA's Project Coordinator shall have the authority vested in a Remedial Project Manager ("RPM") and an On-Scene Coordinator ("OSC") by the NCP, including the authority to halt, conduct, or direct any Work required by this Consent Order, or to direct any other response action undertaken by EPA or Respondent at the Site. Absence of EPA's Project Coordinator from the Site shall not be cause for stoppage of Work unless specifically directed by EPA's Project Coordinator.

XVI. DISPUTE RESOLUTION

80. If Respondent disagrees, in whole or in part, with any EPA disapproval or other decision or directive made by EPA pursuant to this Consent Order, it shall notify EPA in writing of its objections and the bases for such objections, within ten (10) working days of receipt of EPA's disapproval, decision, or directive. Such notice shall set forth the specific points of the dispute, the position Respondent maintains should be adopted as consistent with the requirements of this Consent Order, the factual and legal bases for Respondent's position, and all matters Respondent considers necessary for EPA's determination. EPA and Respondent shall then have ten (10) working days from EPA's receipt of Respondent's objections to attempt to resolve the dispute. If agreement is reached, the resolution shall be reduced to writing, signed by each party, and incorporated into this Consent Order. If the parties are unable to reach agreement within this ten (10) working-day period, the matter shall be referred to the Superfund Division Director. The Superfund Division Director shall then decide the matter and provide a written statement of his or her decision to both parties, which shall be incorporated into this Consent Order.

81. The invocation of the dispute resolution process under this Section, or a claim of force majeure, shall not stay the accrual of stipulated penalties, or extend or postpone any deadline or obligations of Respondent, including the obligation to pay stipulated penalties, under this Consent Order with respect to the disputed issue, unless EPA otherwise agrees in writing. Stipulated penalties shall accrue from the first day of non-compliance by Respondent, and shall

continue to accrue during dispute resolution procedures until twenty (20) days after Respondent requests a determination by the Superfund Division Director pursuant to Paragraph 80 herein. after which date stipulated penalties shall stop accruing until issuance by the Superfund Division Director of a decision resolving the dispute. Stipulated penalties shall continue to accrue during the dispute resolution process for all matters unrelated to the contested matters at issue in the dispute resolution process.

82. Notwithstanding any other provision of this Consent Order, no action or decision by EPA, including without limitation, decisions of the Superfund Division Director pursuant to this Consent Order, shall constitute final EPA action giving rise to any rights to judicial review prior to EPA's initiation of judicial action to compel Respondent's compliance with the requirements of this Consent Order.

XVII. FORCE MAJEURE

83. Respondent agrees to perform all requirements of this Consent Order within the time limits established by this Consent Order, unless the performance is prevented or delayed by events which constitute a force majeure. For purposes of this Consent Order, a force majeure is defined as any event arising from causes not foreseeable and beyond control of Respondent or its consultants, contractors, subcontractors or agents, that delays or prevents performance in accordance with the schedule required by this Consent Order, despite Respondent's best efforts to meet the schedule. Force majeure does not include financial inability to complete the Work, unanticipated or increased costs of performance, normal precipitation events, changed economic

circumstances or failure to obtain federal, state or local permits. With respect to soil cleanup activities, force majeure may include extreme winter weather conditions that prevent performance of soil excavation and/or replacement activities.

84. Respondent shall immediately notify EPA orally, and shall also notify EPA in writing within five (5) days after they become aware of events that constitute a force majeure. Such notice shall: Identify the event causing the delay or anticipated delay; provide an estimate of the anticipated length of delay, including necessary demobilization and remobilization; state a description of the cause of the delay; state the measures taken or to be taken to minimize delay; and state the estimated timetable for implementation of these measures. Such notice shall be reviewed by EPA and EPA will determine whether delay has been or will be caused by a force majeure.

85. Respondent shall exercise best efforts to avoid and minimize any delay caused by a force majeure, as defined herein. Failure to comply with the notice provision of this Section shall constitute a waiver of Respondent's right to assert force majeure.

86. If EPA determines that a delay in performance of a requirement under this Consent Order has been or will be caused by a force majeure, the time period for performance of that portion of Work affected may be extended for a period of time equal to the delay resulting from such circumstances. This schedule extension shall be accomplished through written modification of the Work Plan pursuant to Section XXIII (Modifications). Such an extension does not alter the schedule for performance or completion of other tasks required by the attached SOW or

Work Plan unless these are also specifically altered by approval of EPA. In the event EPA and Respondent cannot agree that any delay or failure has been or will be caused by a force majeure, or if there is no agreement on the length of the extension, such dispute shall be resolved in accordance with the provisions of Section XVI (Dispute Resolution).

XVIII. STIPULATED PENALTIES

87. The stipulated penalties set forth below in Paragraphs 88.A., 88.B., and 88.C. shall be assessed against Respondent at any time Respondent fails to timely and adequately comply with any requirement of this Consent Order, unless a force majeure has occurred, as defined in Section XX (Force Majeure) and EPA has approved the extension of a deadline as required by Section XX (Force Majeure). Compliance by Respondent with this Consent Order shall include completion of an activity under this Consent Order or a plan approved under this Consent Order in a manner acceptable to EPA, and within the specified time schedules in and approved under this Consent Order.

88. The stipulated penalties for violations relating to this Consent Order shall accrue as follows:

A. For failure to submit a timely and adequate Interior Dust Cleanup Work Plan or Smelter Transportation and Materials Handling Plan, as required in Section VIII (Work to be Performed) above:

1. \$250 per day for the first through seventh days of noncompliance;
2. \$500 per day for the eighth through the thirtieth days of noncompliance; and

3. \$1,000 per day for the thirty-first day and each succeeding day of noncompliance thereafter.

B. For failure to submit monthly progress reports or provide sampling and analysis results to EPA or residents as required in Section VII (Work to be Performed) above, within the time period required by this Consent Order:

1. \$100 per day for the first through seventh days of noncompliance;
2. \$200 per day for the eighth through the thirtieth days of noncompliance and;
3. \$300 per day for the thirty-first day and each succeeding day of noncompliance thereafter.

C. For any other violation of this Order, other than failure to submit timely and adequate deliverables as specified in paragraphs 88.A. and 88.B. above:

1. \$250 per day for the first through seventh days of noncompliance;
2. \$500 per day for the eighth through the thirtieth days of noncompliance and;
3. \$1,000 per day for the thirty-first day and each succeeding day of noncompliance thereafter.

89. All penalties shall begin to accrue on the date that complete performance is due or a violation or non-compliance occurs and shall continue to accrue through the final day of correction of the noncompliance. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Order.

90. All penalties owing under this Section shall be due within thirty (30) days of receipt by Respondent of written demand by EPA for payment thereof. Interest shall begin to accrue on the unpaid balance at the end of this thirty (30) day period. Interest will accrue on the unpaid balance until such penalties and interest have been paid in full and will be compounded annually.

91. All penalties shall be paid by certified or cashier's check made payable to the Treasurer of the United States, and shall be remitted to:

Mellon Bank
Attn: Superfund Accounting
EPA Region VII
(Comptroller Branch)
P.O. Box 360748M
Pittsburgh, PA 15251

All payments shall reference the EPA Docket Number which appears on the face of this Consent Order and the Site name, and shall indicate that they are in payment of stipulated penalties. A copy of the transmittal of payment shall be sent to EPA's Project Coordinator.

92. The stipulated penalties set forth in this Section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent's failure to comply with any of the requirements of this Consent Order, nor shall payment of said penalties relieve Respondent of the responsibility to comply with this Consent Order.

XIX. RESERVATION OF RIGHTS

93. EPA and Respondent acknowledge and agree that with respect to the properties which fall into one of the categories listed above in Paragraph 35, the soil cleanup schedule set

forth in Paragraph 35 herein requires a more expedited cleanup than the schedule contained in the May 2001 Consent Order, and that compliance with the cleanup schedule contained in Paragraph 35 herein will constitute compliance with the cleanup schedule contained in the May 2001 Consent Order.

94. This Order only changes the cleanup schedule contained in the May 2001 Consent Order for properties which fall into one of the categories listed above in Paragraph 35. With respect to properties at the Site where soil has not yet been sampled or where soil has been sampled and the property is not in one of the categories listed in paragraph 1 herein, the schedule for characterization and cleanup contained in the May 2001 Consent Order remains in effect.

95. EPA hereby expressly reserves all rights and defenses that it may have, including, but not limited to, its rights to disapprove of Work performed by Respondent and to perform all or part of the Work required hereunder itself; and to require that Respondents perform tasks in addition to those stated in this Consent Order.

96. EPA hereby expressly reserves all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, including without limitation: (1) the issuance of an order to require further response action as determined necessary by EPA, (2) bringing an action seeking the assessment of penalties under Section 106(b) of CERCLA, 42 U.S.C. § 9606(b), (3) bringing an action to recover costs under Section 107 of CERCLA, 42 U.S.C. § 9607; (4) bringing an action against Respondent to collect stipulated penalties, if any, assessed pursuant to Section XVIII, (Stipulated Penalties), of this Consent Order; and/or to seek penalties pursuant to

Section 109 of CERCLA, 42 U.S.C. § 9609, and (5) seeking injunctive relief, monetary penalties and punitive damages for any violation of law or of this Consent Order.

97. This Consent Order shall not be construed as a release, waiver or limitation of any rights, remedies, powers and/or authorities, civil or criminal, that EPA has under CERCLA, the Resource Conservation and Recovery Act (RCRA), or any other statutory, regulatory or common law authority of the United States.

98. Compliance by Respondents with the terms of this Consent Order shall not relieve Respondents of their obligations to comply with CERCLA, RCRA or any other applicable local, state or federal laws and regulations.

99. This Consent Order shall not limit or otherwise preclude the EPA from taking, directing or ordering any additional enforcement actions pursuant to CERCLA, RCRA or any other available legal authorities should EPA determine that such actions are 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.

100. EPA hereby expressly reserves any right it may have to perform any Work required to be performed hereunder by Respondent, including, but not limited to, response actions as it deems necessary to protect public health or the environment. EPA may exercise any authority it may have under CERCLA to undertake removal actions or remedial actions at any time.

101. EPA does not waive and hereby expressly reserves its right to seek recovery pursuant to Section 107 of CERCLA of all oversight costs incurred by EPA in connection with this Consent Order.

102. If EPA determines that Work in compliance or noncompliance with this Consent Order has caused or may cause a release of hazardous substances or hazardous constituents or a threat to human health or the environment or that Respondent is not capable of undertaking any of the Work required hereunder, EPA reserves the right to order Respondent to stop further implementation of this Consent Order for such period of time as EPA determines may be needed to abate any such release or threat or to undertake any action that EPA determines is necessary to abate such release or threat.

XX. OTHER CLAIMS

103. By issuance of this Consent Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. Neither the United States nor EPA shall be a party or be held out as a party to any contract entered into by the Respondent or its agents, successors, representatives, contractors, or assigns in carrying out activities pursuant to this Consent Order. Neither the Respondent nor its agents, successors, representatives, contractors, or assigns shall be considered an agent of the United States.

104. Nothing in this Consent Order constitutes a satisfaction of or release from any claim or cause of action against the Respondent or any person not a party to this Consent Order, for any

liability such person may have under CERCLA, RCRA or other statutes, or the common law, including, but not limited to, any claims of the United States for costs, damages and interest under Sections 104 and 107(a) of CERCLA, 42 U.S.C. §§ 9604 and 9607(a).

105. This Consent Order does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). Respondent agrees not to sue the United States for, and waive any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substances Superfund arising out of any activity performed under this Consent Order.

106. No action or decision by EPA pursuant to this Consent Order 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).

XXI. CONTRIBUTION

107. With regard to claims for contribution against Respondent for matters addressed in this Consent Order, the parties hereto agree that each Respondent is entitled to protection from such contribution actions or claims to the extent provided by Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

108. Nothing in this Consent Order precludes the United States or Respondent from asserting any claims, causes of action or demands against any persons who are not parties to this Consent Order for indemnification, contribution, or cost recovery.

109. Respondent agrees that with respect to any suit or claim for contribution brought against it for matters covered by this Consent Order, Respondent will notify EPA of the institution of the suit or claim within thirty (30) days of service of any such suit or claim.

XXII. INDEMNIFICATION

110. Respondent agrees to indemnify, save and hold harmless the United States, its officials, agents, contractors, and employees from any and all claims or causes of action arising from, or on account of, negligent or wrongful acts or omissions of Respondent, its officers, employees, contractors, subcontractors, receivers, trustees, agents, successors or assigns, in carrying out activities pursuant to this Consent Order, including, but not limited to, claims arising from construction delays.

111. Respondent agrees to pay the United States all costs the United States incurs, including, but not limited to, attorney's fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or wrongful acts or omissions of Respondent, or any of its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Order.

XXIII. MODIFICATIONS

112. This Consent Order may be modified by mutual agreement of the Respondents and EPA. Any such amendment shall be in writing and shall be signed by an authorized representative of Respondent and EPA. Unless otherwise provided for in the amendment, the effective date of any such modification shall be the date on which the written agreement or modification is signed by EPA after signature by the Respondent. All modifications shall be incorporated into and become a part of this Consent Order.

113. No informal advice, guidance, suggestion or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondent shall relieve the Respondent of its obligation to obtain such formal approval as may be required by this Consent Order, and to comply with all requirements of this Consent Order unless or until this Consent Order may be formally modified.

XXIV. NOTICE OF COMPLETION

114. Respondent shall notify EPA when Respondent believes that all soil and interior dust cleanup activities required by this Consent Order have been fully performed in accordance with this Consent Order, and shall include with the notification a summary report listing all completed soil and dust cleanup activities. EPA will review the notice, and if EPA determines that any soil or interior cleanup Work has not been completed in accordance with this Consent Order, EPA will notify the Respondent, provide a list of the additional required Work, and require that Respondent complete the Work. If EPA determines that the soil and interior dust

cleanup Work required by this Consent Order is complete, EPA shall provide a Notice of Completion to the Work Respondent. Respondent has continuing obligations under this Consent Order with respect to implementation of the approved Smelter Transportation and Materials Handling Plan and records retention that are not affected by the Notice of Completion.

XXV. SEVERABILITY

115. If any judicial or administrative authority issues an order that invalidates any provision of this Consent Order, or finds that Respondent has sufficient cause not to comply with one or more provisions of this Consent Order, then Respondent shall remain bound to comply with all other provisions of this Consent Order.

XXVI. EFFECTIVE DATE

116. This Consent Order shall become effective on January 1, 2002.

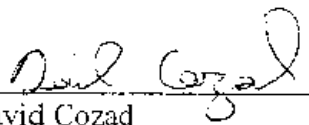
XXVII. SIGNATURE BY PARTIES

117. Each party to this Consent Order shall execute the Consent Order on the signature page by signing the appropriate signature line.

IT IS SO ORDERED.

BY:  DATE: 12/21/01
Michael J. Sanderson
Director
Superfund Division
Region VII
United States Environmental Protection Agency

For the United States Environmental Protection Agency

BY:  DATE: 12/21/01
David Cozad
Associate Regional Counsel
Region VII
United States Environmental Protection Agency

In the Matter of
Herculeanum Lead Smelter Site
Docket No. CERCLA-07-2002-0038

The representative of Respondent who has signed the signature page certifies that he/she is fully authorized to enter into the terms and conditions of this Consent Order and to bind the party he/she represents to this document.

FOR THE DOE RUN RESOURCES CORPORATION

BY: Jeffrey L. Zeims DATE: 12-21-01

Name: JEFFREY L. ZEIMS

Title: PRESIDENT & CEO
THE DOE RUN COMPANY

APPENDIX A
Post soil abatement interior dust cleanup Procedures

Work to be performed by a lead trained cleaning crew under modified site-specific lead abatement training program by Doe Run's Hygienist. Employees shall follow general lead worker rules, such as leave at work clothing, shower at end of shift, eat in clean cafeteria or change building, no smoking on job etc.

HEPA filter vacuums to be used for all floors or tri-phosphate mopping (as decided in the work plan) walls, doors and window surfaces. Basement cleaning will utilize vacuuming as well.

Attics will be addressed only if they are accessible to young children on a regular unsupervised basis and have been turned into an additional room with a floor, walls, etc. In this case they will be treated like a main floor room. Attic leakage that can contaminate the house will be addressed by sealing leaking cracks or other effective method.

HVAC ductwork will be cleaned by vacuuming. In addition, a long life HEPA filter will be installed in the HVAC system. Filter is recommended for annual replacement. Provide plastic trash bags for disposal in regular trash according to Missouri DNR's lead remediation household solid waste circular.

Resident's cooperation will be required to remove all pictures, plaques and knickknacks from surfaces to be cleaned. Furniture items weighing in excess of 50#s would be cleaned around and under where accessible.

Within a short time (a few days) after cleaning, a sampling crew shall come in to verify that floor and windowsill standards have been met. They will also test surfaces for presence of Lead Based Paint and do a visual condition check.

If any of the clearance tests come back negative, the cleaning crew will return to clean those areas not passing.