

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION SEVEN

02 APR 15 AM 9:17

ENVIRONMENTAL PROTECTION  
AGENCY-REGION VII  
REGIONAL HEARING CLERK

IN THE MATTER OF:

NEWTON COUNTY MINE  
TAILINGS SITE

NEWTON COUNTY, MISSOURI

Respondent(s)

BLUE TEE CORPORATION  
New York, New York

ASARCO INCORPORATED  
New York, New York

UNILATERAL ADMINISTRATIVE  
ORDER FOR REMOVAL RESPONSE  
ACTIVITIES

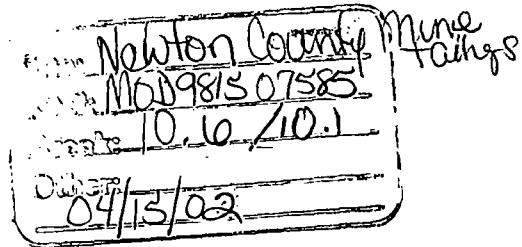
U.S. EPA Region

CERCLA

Docket No. 7 2002-0114

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

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## **I. JURISDICTION AND GENERAL PROVISIONS**

1. This Order is issued pursuant to 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, 42 U.S.C. § 9606(a), as amended ("CERCLA"), and delegated to the Administrator of the United States Environmental Protection Agency ("EPA") by Executive Order No. 12580, January 23, 1987, 52 Fed. Reg. 2923, and further delegated to the Regional Administrators by EPA Delegation Nos. 14-14-A and 14-14-B and to the Director of the Superfund Division by EPA Region VII Delegation No. R7-14-14C, dated January 1, 1995.
2. This Order pertains to property located in Newton County, Missouri the "Newton County Mine Tailings Site" or the "Site". This Order requires the Respondents to conduct removal actions described herein 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 Site.
3. EPA has notified the State of Missouri, through the Missouri Department of Natural Resources, of this action pursuant to section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

## **II. PARTIES BOUND**

4. This Order applies to and is binding upon Respondents and Respondents' heirs, directors, officers, employees, agents, receivers, trustees, successors and assigns. Any change in ownership

or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondents' responsibilities under this Order.

Respondents are jointly and severally liable for carrying out all activities required by this Order. Compliance or noncompliance by one or more Respondents with any provision of this Order shall not excuse or justify noncompliance by any other Respondents.

5. Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Order and comply with this Order. Respondents shall be responsible for any noncompliance with this Order.

### **III. DEFINITIONS**

6. 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 CERCLA or in such regulations. Whenever terms listed below are used in this Order or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

A. "Site" shall mean the Newton County Mine Tailings Site in Newton County, Missouri.

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

C. "Order" shall mean this Unilateral Administrative Order for Removal Response Activities and all appendices attached hereto and incorporated by reference. In the event of conflict between this Order and any appendix, and any provision of any other agreement, order or writing, the terms and conditions of this Order shall control.

D. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" or "Business 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 close of business of the next working day.

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

F. "Facility" shall mean the Newton County Mine Tailings Site as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

G. "MDNR" shall mean the Missouri Department of Natural Resources.

H. "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, as amended.

I. "Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral or an upper case letter.

J. "Parties" shall mean the United States, and the Respondents.

K. "Removal Action" shall mean those response actions described in the Statement of Work and the Action Memorandum attached hereto as Appendices A and B.

L. "Removal Action Memorandum" or "Action Memorandum" shall mean the decision document by which EPA selected the appropriate removal response actions for the Site, issued by the EPA Superfund Division Director on March 21, 2002, attached hereto as Appendix B and incorporated by reference.

M. "Respondents" shall mean Blue Tee Corporation or Blue Tee, and ASARCO, Incorporated or ASARCO.

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

O. "Section" shall mean a portion of this Order identified by a roman numeral.

P. "Site" shall mean the Newton County Mine Tailings Site, Newton County, Missouri.

Q. "Subdistrict" or "Granby Subdistrict" shall mean the Granby Subdistrict of the Newton County Mine Tailings Site as approximately designated on the map attached as Appendix C, and encompasses all areas where pollutants, contaminants and/or hazardous substances released from the area designated as the Granby Subdistrict have come to be located.

R. "Statement of Work" shall mean the statement describing the Work to be implemented at the Site, attached as Appendix A and incorporated by reference, and any and all substitutions, modifications or revisions made to such document, in accordance with this Order.

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

T. "Work" shall mean all activities Respondent is required to perform under this Order, except the record retention requirements Section VI, Paragraph 41 of this Order.

#### **IV. FINDINGS OF FACT**

7. The Newton County Mine Tailings Site includes the former mining, milling and smelting areas located throughout Newton County, Missouri. Preliminary investigations indicate that the former mining, milling and smelter areas are located in the vicinity of Beef Branch, Dayton (Racine), Diamond, Granby, Neosho-Mosely, Newtonia (Stark City), Roaring Springs (Central City), Saginaw-Thurman, Seneca, Spurgeon, Wentworth, Spring City, South Joplin and South Duenweg. Three of these mining camps, Roaring Springs, South Joplin and South Duenweg, are extensions of the recognized mining subdistrict in Jasper County, Missouri and are being investigated as part of the Jasper County Superfund Site.

8. The Site is part of the Tri-State Mining District. The Tri-State Mining District was one of the largest lead-zinc mining areas in the world.

9. Mining, milling, and smelting activities in Newton County resulted in large piles of mining materials remaining at the Site.

10. Hazardous substances, pollutants or contaminants have been released into the environment from former mining, milling, and smelting areas and operations located within the Site. The hazardous substances, pollutants or contaminants, include, without limitation, residual metals in mining wastes and soils such as lead, cadmium, and zinc.

11. An Administrative Order on Consent (AOC) was signed by Blue Tee Corp and ASARCO in June 1997 to complete a Removal Site Evaluation (RSE), conduct a time-critical removal action, and prepare an Engineering Evaluation/Cost Analysis (EE/CA) for the Granby and Diamond Mining Subdistricts. Blue Tee and ASARCO conducted soil sampling from September to December 1997, and EPA received the draft RSE in February 1998. During the investigation, the Respondents collected soil samples from 471 residential yards. EPA required additional work including the sampling of soils around a former smelter area because the data indicated that some residences had soils that exceeded the time-critical action level for lead of 2,500 ppm and a day care facility exceeded 1,000 ppm. The additional sampling results were submitted in the revised RSE on September 10, 1998. The RSE indicates that 10 residences exceeded the time-critical removal action level of 2,500 ppm for lead in the soils. EPA approved the RSE with comments on December 4, 1998, and EPA received and subsequently approved a Removal Action Plan (RAP).

12. The Respondents conducted a time-critical action for residential soil removal in 1999. A total of 14 residential locations were ultimately completed in October 1999. Three residences that qualified for the time critical removal action, however, refused access.

13. In accordance with the 1997 AOC, the Respondents submitted the EE/CA for the non-time critical removal action of residential soil to EPA in July 2001. The EE/CA was slightly modified by EPA and released for public comment in August 2001. The EE/CA recommended a non-time-critical removal action level of 400 mg/kg for lead. The EE/CA identified approximately 100 residential yards in the Diamond and Granby subdistricts that exceed the non-time-critical action

level of 400 mg/kg for lead.

14. EPA released the EE/CA for thirty days of comment on August 15, 2001. Notice of the opportunity to comment on the proposed EE/CA was published in the Joplin Globe and Neosho Daily News, two local newspapers. EPA also issued a fact sheet inviting public comment on the EE/CA, the alternatives available to address the site contamination, and EPA's preferred alternative to protect human health and the environment. The fact sheet was issued to Newton County residences, elected officials, and the media.

15. EPA issued an Action Memo for the non-time-critical removal of residential soils on March 21, 2002. The selected action is the excavation and disposal of contaminated soils exceeding the action level and backfilling the excavated area with clean soil.

16. This non-time-critical response is necessary to address the continued risks that contaminated soils present to human health or the environment that were not addressed during the time-critical removal actions. Specifically, soils contaminated with lead above 400 mg/kg present a continued threat to the health of persons exposed to such soils. Young children in particular are at risk due to the potential ingestion of contaminated soils.

17. American Zinc, Lead and Smelting Company purchased Granby Mining and Smelting Company through a stock purchase in 1916. Granby Mining and Smelting Company conducted mining activities in the Granby Subdistrict in Newton County from approximately 1865 to 1916. Records reviewed to date establish that American Zinc, Lead and Smelting Company, or its wholly owned subsidiary Granby Mining & Smelting Company, conducted mining activities in the Granby Subdistrict intermittently from approximately 1917 to 1935. Blue Tee is a successor corporation to American Zinc, Lead and Smelting Company, and Granby Mining & Smelting Company.

18. ASARCO Incorporated is a successor corporation to Federal Mining & Smelting Company. Federal Mining & Smelting Company conducted mining activities in the Granby Subdistrict intermittently from approximately 1916 to 1953.

19. The EPA asserts that there has been a release or a threat of release of hazardous substances into the environment as a result of the mining, milling, and smelting activities conducted at the Site by the Respondents. The hazardous substances include, without limitation, residual metals such as cadmium, lead, and zinc.

20. Acute lead poisoning is most common in young children and may lead to permanent brain damage. Human exposure to lead through ingestion may result in adverse health effects such as damage to the central nervous system, peripheral nervous system, and kidney and blood disorders.

21. Exposure to cadmium through ingestion may cause such effects as teratogenicity, reproductive toxicity, and kidney disorders.

22. This Site is not currently on the National Priorities List ("NPL").

#### **V. CONCLUSIONS OF LAW AND DETERMINATIONS**

Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

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

24. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substance(s)" as defined by section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

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

26. Respondents are liable under Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2), as persons "who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of."

27. 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).

28. The conditions present at the Site constitute an imminent and substantial endangerment to public health, welfare, or the environment. These factors include, but are not limited to, the following:

A. actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

B. high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

C. weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

29. 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).

30. The removal action required by this Order is necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP and CERCLA.

## VI. ORDER

31. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, EPA hereby orders that Respondents 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, and perform the following actions:

32. Notice of Intent to Comply

Each Respondent shall notify EPA in writing within seven (7) days after the Effective Date of this Order of Respondent's irrevocable intent to comply with this Order. Failure of any Respondent to provide such notification within this time period shall be a violation of this Order by such Respondent.

33. Designation of Contractor, Project Coordinator, and On-Scene Coordinator

A. Respondents shall perform the removal action themselves or retain contractors to perform the removal action. Respondents shall notify EPA of Respondents' qualifications or the names and qualifications of such contractors within twenty (20) days of the Effective Date of this Order.

B. Respondents shall also notify EPA of the names and qualifications of any other contractors or subcontractors retained to perform the removal action under this Order at least ten (10) days prior to commencement of such removal action.

C. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by the Respondents, or of Respondents' choice of themselves to do the removal action. If EPA disapproves of a selected contractor or Respondents, Respondents shall retain a different contractor or notify EPA that it will perform the removal action itself within five (5) business days following EPA's disapproval and shall notify EPA of that contractor's name or Respondent(s)'s name and qualifications within five (5) business days of EPA's disapproval.

D. The proposed contractor must demonstrate compliance 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 contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01-002, March 2001) or equivalent documentation as determined by EPA.

E. Within ten (10) days after the Effective Date of this Order, the Respondents shall designate a Project Coordinator who shall be responsible for administration of all the Respondents' actions required by the Order. Respondents shall submit the designated coordinator's name,

address, telephone number, and qualifications to EPA. To the greatest extent possible, the Project Coordinator shall be present on-site or readily available during site work. EPA retains the right to disapprove of any Project Coordinator named by the Respondents. If EPA disapproves of a selected Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name and qualifications within ten (10) days following EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by all Respondents.

F. The EPA has designated Mark Doolan of the EPA Region VII, as its On-Scene Coordinator (OSC)/ Remedial Project Manager (RPM). Respondents shall direct all submissions required by this Order to the OSC/RPM at the following address:

Mark Doolan  
Remedial Project Manager  
EPA Region VII  
901 N. 5<sup>th</sup> Street  
Kansas City, Kansas 66101  
Telephone: 913-551-7169

Respondent shall direct all submissions required by this Order by certified or overnight mail to EPA's OSC/RPM.

34. Work to Be Performed

Respondents shall perform, at a minimum, the Work specified in the Statement of Work (Appendix A) and the Action Memorandum (Appendix B), attached to this Order. All activities required by this Order shall be conducted in accordance with CERCLA, the NCP, EPA policies and procedures as amended, and the Statement of Work.

35. Removal Action Plan and Implementation

A. Within twenty (20) days after the effective date of this Order, the Respondents shall submit to EPA for approval a Removal Action Plan for performing the removal action set forth above. The Removal Action Plan shall provide a description of, and an expeditious schedule for, the action required by this Order.

B. Respondents shall prepare a Quality Assurance Project Plan (QAPP) as part of the Removal Action Plan. The QAPP should be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February, 1998).

C. EPA may approve, disapprove, require revisions to, or modify the Removal Action Plan. If EPA requires revisions, Respondents shall submit a revised Removal Action Plan within

five (5) days of receipt of EPA's notification of the required revisions. Respondents shall implement the Removal Action Plan as finally approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Removal Action Plan, the schedule, and any subsequent modifications shall be fully enforceable under this Order.

Respondents shall notify EPA at least 48 hours prior to performing any on-site work pursuant to the EPA approved Removal Action Plan. Respondents shall not commence or undertake any removal actions at the Site without prior EPA approval.

36. Health and Safety Plan

Within twenty (20) days after the effective date of this Order, the Respondents shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-site work under this Order. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide, (November 1984, updated July 1988). In addition, the plan shall comply with all current applicable Occupational Safety and Health Administration (OSHA) regulations; Hazardous Waste Operations and Emergency Response; found at 29 CFR Part 1910. Respondents shall incorporate all changes to the plan recommended by EPA, and implement the plan during the pendency of the removal action.

37. Quality Assurance and Sampling

A. All sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondents shall follow the following documents as appropriate as guidance for QA/QC and sampling: "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures," OSWER Directive Number 9360.4-01; "Environmental Response Team Standard Operating Procedures," OSWER Directive Numbers 9360.4-02 through 9360.4-08; and the Representative Sampling Guidance for soil, air, ecology, waste, and water as this information becomes finalized and available.

B. Upon request by EPA, Respondents shall have such a laboratory analyze samples submitted by EPA for quality-assurance monitoring. Respondents shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis. Respondents shall only use laboratories that have a documented quality system which complies with ANSI/ASQC E-4 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-01/02, March 2001) or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) as meeting the quality system requirements

C. Upon request by EPA, Respondents shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondents while performing actions under this Order. Respondents shall notify EPA not less than two (2) days in advance of any sample collection activity. EPA shall have the right to take any additional samples that it deems necessary.

38. Reporting

A. Respondents shall submit a written progress report to EPA concerning actions undertaken pursuant to this Order monthly from the Effective Date of this Order until termination of this Order, unless otherwise directed by the OSC/RPM in writing. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

B. Any Respondent and Successor in title shall, at least thirty (30) days prior to the conveyance of any interest in real property at the site, give written notice of this Order to the transferee and written notice to EPA and the State of Missouri of the proposed conveyance, including the name and address of the transferee. The party conveying such an interest shall require that the transferee comply with Paragraph 40 of this Order - Access to Property and Information.

39. Removal Action Report

A. Within sixty (60) days after completion of all removal actions required under this Order, the Respondents shall submit for EPA review and approval a Removal Action Report summarizing the actions taken to comply with this Order. The Removal Action Report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports". The Removal Action Report shall include all the information as described in the Statement of Work attached as Appendix A.

B. The Removal Action Report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

40. Access to Property and Information

A. Respondents shall provide and/or obtain access to the Site and off-site areas to which access is necessary to implement this order, and provide access to all records and documentation related to the conditions at the Site and the action conducted pursuant to this Order. Such access shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and State of Missouri representatives. These individuals shall be permitted to move freely at the Site and appropriate off-site areas in order to conduct actions which EPA determines to be necessary. Respondents shall submit to EPA the results of all sampling or tests and all other data generated by Respondents or their contractors, or on the Respondents' behalf during implementation of this Order.

B. Where action under this Order is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within thirty (30) days after the Effective Date of this Order, or within thirty (30) days after notice that access is necessary at a property, or as otherwise specified in writing by the OSC/RPM. "Best efforts" shall mean a visit to each residence for which access is sought; leaving a letter describing the process and purpose of the Work to be performed on the property with a telephone contact number; and one follow-up visit to the residence if no response is received from the letter or contact. Respondent must speak to an adult individual at the residence on at least one of these visits. Respondents shall immediately notify EPA if after using their best efforts they are unable to obtain such agreements. Respondents shall describe in writing their efforts to obtain access. EPA may then assist Respondents in gaining access, to the extent necessary to effectuate the removal actions described herein, using such means as EPA deems appropriate. EPA reserves the right to seek reimbursement from Respondents for all costs and attorney's fees incurred by the United States in obtaining access for Respondents.

41. Record Retention, Documentation, Availability of Information

A. Respondents shall preserve all documents and information relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for three (3) years following completion of the removal actions required by this Order. At the end of this three (3) year period and thirty (30) days before any document or information is destroyed, Respondents shall notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to EPA. In addition, Respondents shall provide documents and information retained under this Section at any time before expiration of the three (3) year period at the written request of EPA.

B. Respondents may assert a business confidentiality claim pursuant to 40 C.F.R. § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this 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(s). EPA shall only disclose information covered by a business

confidentiality claim to the extent permitted by, and by means of the procedures set forth at, 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 Respondents.

42. Off-Site Shipments

All hazardous substances, pollutants or contaminants removed off-site pursuant to this Order for treatment, storage, or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with 42 U.S.C. § 9621(d)(3) and the following rule: "Amendment to the National Oil and Hazardous Substances Pollution Contingency Plan; Procedures for Planning and Implementing Off-Site Response Actions: Final Rule" 58 Fed. Reg. 49,200 (September 22, 1993) codified at 40 C.F.R. § 300.440. Regional Offices will provide information on the acceptability of a facility under section 121(d)(3) of CERCLA and the above rule. Unless impracticable, prior notification of out-of-state waste shipments should be given consistent with OSWER Directive 9330.2-07.

43. Compliance With Other Laws

Respondent shall perform all actions required pursuant to this Order in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA section 121(e) and 40 C.F.R. section 300.415(i). In accordance with 40 C.F.R. § 300.415(i), all on-site actions required pursuant to this Order shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental, state environmental, or facility siting laws. (see "The Superfund Removal Procedures for Consideration of ARARs During Removal Actions," OSWER Directive No. 9360.3-02, August 1991). Respondents shall identify ARARs in the Removal Action Plan subject to EPA approval.

44. Emergency Response and Notification of Releases

A. If any incident, or change in site conditions, during the actions conducted pursuant to this 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, the Respondents shall immediately take all appropriate action. The Respondents shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the OSC/RPM or, in the event of his/her unavailability, shall notify the Regional Duty Officer, Emergency Planning and Response Branch, EPA Region VII, (913) 281-0991 concerning the incident or Site conditions. If Respondents fail to take action, then EPA may respond to the release or endangerment and reserve the right to pursue cost recovery.

B. In addition, in the event of any release of a hazardous substance, Respondents shall immediately notify EPA's on-call OSC at (913) 281-0991 and the National Response Center at

telephone number (800) 424-8802. Respondents 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. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA section 103(c) and section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. Sections 11001 *et seq.*

## **VII. AUTHORITY OF THE EPA ON-SCENE COORDINATOR/REMEDIAL PROJECT MANAGER**

45. The OSC/RPM shall be responsible for overseeing the proper and complete implementation of this Order. The OSC/RPM shall have the authority vested in an OSC by the NCP, 40 CFR 300.120, including the authority to halt, conduct, or direct any action required by this Order, or to direct any other removal action undertaken by EPA or Respondents at the Site. Absence of the OSC/RPM from the Site shall not be cause for stoppage of work unless specifically directed by the OSC/RPM.

46. EPA and Respondents shall have the right to change their designated OSC/RPM or Project Coordinator. EPA shall notify the Respondents, and Respondents shall notify EPA two (2) days, before such a change is made. Notification may initially be made orally, but shall be followed promptly by written notice.

## **VIII. ENFORCEMENT: PENALTIES FOR NONCOMPLIANCE**

47. Violation of any provision of this Order may subject Respondents to civil penalties of up to twenty-seven thousand five hundred dollars (\$27,500) per violation per day, as provided in section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondent(s) may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondent(s) violate this Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to section 106 of CERCLA, 42 U.S.C. § 9606.

## **IX. RESERVATION OF RIGHTS**

48. Except as specifically provided in this Order, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. 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 or the Site and not reimbursed by Respondents.

#### **X. OTHER CLAIMS**

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

50. This Order does not constitute a pre-authorization of funds under section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2).

51. Nothing in this Order shall constitute a satisfaction of or release from any claim or cause of action against the Respondents or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under section 106(a) and 107(a) of CERCLA, 42 U.S.C. § 9606(a) and 9607(a).

#### **XI. MODIFICATIONS**

52. Modifications to any plan or schedule or the attached EPA Statement of Work may be made in writing by the OSC/RPM or at the OSC/RPM's oral direction. If the OSC/RPM makes an oral modification, it will be memorialized in writing by the EPA within seven (7) days; provided, however, that the effective date of the modification shall be the date of the OSC/RPM's oral direction. The rest of the Order, or any other portion of the Order may only be modified in writing by signature of the Superfund Division Director, EPA Region VII.

53. If Respondents seek permission to deviate from any approved plan or schedule or Statement of Work, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis.

54. No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondents shall relieve the Respondents of their obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

#### **XII. NOTICE OF COMPLETION**

55. When EPA determines, after EPA's review of the Removal Action Report, that all removal actions have been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, including the record retention requirements of

Paragraph 41 (Record Retention, Documentation, Availability of Information), EPA will provide notice to the Respondents. If EPA determines that any removal actions have not been completed in accordance with this Order, EPA will notify the Respondents, provide a list of the deficiencies, and require that Respondents modify the Removal Action Plan to correct such deficiencies. The Respondents shall implement the modified and approved Removal Action Plan and shall submit a modified Removal Action Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified Removal Action Plan shall be a violation of this Order.

### **XIII. ACCESS TO ADMINISTRATIVE RECORD**

56. The Administrative Record supporting these removal actions is being prepared pursuant to the requirements of the NCP and will be available for review at the EPA Region VII offices, at 901 N. 5<sup>th</sup> Street, Kansas City, Kansas and at Granby City Hall, 302 North Main, Granby, Missouri.

### **XIV. OPPORTUNITY TO CONFER**

57. Within three (3) days after the Effective Date of this Order, Respondent(s) may request a conference with EPA. Any such conference shall be held within five (5) days after the Effective Date unless extended by agreement of the parties. At any conference held pursuant to the request, Respondents may appear in person or be represented by an attorney or other representative.

58. If a conference is held, Respondents may present any information, arguments or comments regarding this Order. Regardless of whether a conference is held, Respondents may submit any information, arguments or comments in writing to EPA within five (5) days following the Effective Date of this Order. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge this Order, and does not give Respondents a right to seek review of this Order. Requests for a conference, or any written submittal under this paragraph, shall be directed to

J. Daniel Breedlove  
Assistant Regional Counsel  
EPA Region VII  
901 N. 5<sup>th</sup> Street  
Kansas City, Kansas 66101  
Telephone (913) 551-7172  
Facsimile (913) 551-7925.

### **XV. INSURANCE**

59. At least seven (7) days prior to commencing any on-site work under this Order, the Respondents shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of two million dollars, combined single

limit. Within the same time period, the Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. If the Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then the Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

#### **XVI. ADDITIONAL REMOVAL ACTIONS**

60. If EPA determines that additional removal actions not included in an approved plan are necessary to protect public health, welfare, or the environment, EPA will notify Respondents of that determination. Unless otherwise stated by EPA, within twenty (20) days of receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Respondents shall submit for approval by EPA a Work Plan for the additional removal actions. The plan shall conform to the applicable requirements of sections VI of this Order. Upon EPA's approval of the plan pursuant to Section VI, Respondents shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. This section does not alter or diminish the OSC/RPM's authority to make oral modifications to any plan or schedule pursuant to Section XI (Modifications).

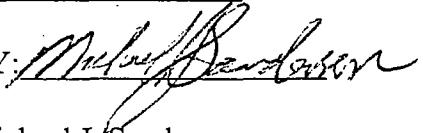
#### **XVII. SEVERABILITY**

61. 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 or determined to be subject to a sufficient cause defense by the court's order.

#### **XVIII. EFFECTIVE DATE**

62. This Order shall be effective three (3) days after signature by the Superfund Division Director.

##### **IT IS SO ORDERED**

BY:  DATE: 4/12/02

Michael J. Sanderson  
Director  
Superfund Division  
Region VII  
United States Environmental Protection Agency

EFFECTIVE DATE: 4/15/02

## APPENDIX A

### STATEMENT OF WORK NON-TIME CRITICAL SOIL REMOVAL GRANBY SUBDISTRICT NEWTON COUNTY SITE NEWTON COUNTY, MISSOURI

#### 1.0 Introduction

The Newton County Site is located in the Missouri portion of the Tri-State Mining District. The Tri-State Mining District covers approximately 2,500 square miles in northeast Oklahoma, southeast Kansas and southwest Missouri. The Tri-State Mining District was one of the foremost lead-zinc mining areas of the world and provided nearly continuous production from about 1850 until 1971. EPA has formerly listed three mining-related Superfund Sites in the Tri-State Mining District. These are the Tar Creek, Oklahoma Site; the Cherokee County, Kansas Site and the Jasper County, Missouri Site. The Newton County Site is not included on the National Priorities List ("NPL"), but an NPL scoring package is currently being prepared for the Site.

The U.S. Geological Survey and the U.S. Bureau of Mines recognized 14 mining camps or centers in Newton County. Based on an analysis of the available production information, these mining camps have been grouped into six mining subdistricts. The subdistricts are the Granby subdistrict, Spring City - Beef Branch - Seneca - Spurgeon subdistrict, Diamond subdistrict, Wentworth subdistrict, Stark City subdistrict and the Jasper County Overlap.

EPA and the Respondents entered into an Administrative Agreement on Consent (AOC) in June 1997 to: 1) perform a removal site evaluation, 2) conduct certain time-critical removal actions, and 3) prepare an Engineering Evaluation/Cost Analysis (EE/CA) addressing residential soils and private drinking water supplies within the Granby and Diamond subdistricts. The soil related time-critical removal actions and the EE/CA for residential soil have been completed. Generally, the removal site investigation has been completed although some properties may remain to be sampled. This Statement of Work (SOW) describes the non-time critical (NTC) removal action that shall be performed at the properties located within the Granby Subdistrict, based on the residential soil EE/CA. The NTC removal action is necessary to address the continued threat to human health posed by contamination not addressed by the time critical removals.

#### 2.0 Additional Soil Sampling

Sampling at most properties in areas of concern has been completed. However, additional areas, such as where owners previously denied access, newly constructed homes, or areas not sufficiently characterized, may require sampling. Where such areas are identified by

EPA, sampling will be conducted by Respondents as described below within ten (10) days of notification by EPA.

A minimum of three composite soil samples shall be collected from each residence to be sampled. The samples will consist of a front yard sample, a backyard sample, and a drip zone sample. These areas will be denoted as "zones" in this SOW. For yards over 10,000 square feet, the yard shall be divided into four approximately equal quadrants (i.e. two front yard and two back yard) with a composite sample collected from each quadrant. These areas will be denoted as "quadrants" in this SOW. In addition, composite soil samples shall be collected from obvious play areas (e.g., swing sets or sand boxes, and gardens) if present. In other areas where children congregate (e.g. playgrounds, parks, schoolyards) one composite sample shall be collected for every 2,500 square feet of area. Each composite sample shall consist of a minimum of five aliquots (0 to 2 inches in depth) distributed as equally as possible within the area to be sampled. Except for the drip zone composite sample, no aliquots shall be collected within five feet of any painted structure to avoid soil which may be contaminated by lead-based paint. Aliquots shall be collected utilizing clean stainless-steel equipment. The aliquots shall be thoroughly mixed together; sieved through a No. 10 U.S. Standard Sieve to remove grass, roots and other debris; and placed in an appropriate container for analysis. A field sheet shall be prepared for each property sampled that will include a diagram depicting the general layout of the property with associated buildings, property, play areas, garden and other property features, the location of the aliquots collected for each composite sample, and the sampling results. The field sheet will also include the property address; the owner's name and phone number, and owner's address if different from the property address; and the date of sampling.

The composite samples shall be analyzed for cadmium and lead concentrations by means of a calibrated field portable x-ray fluorescence spectrometer (XRF). The XRF shall be operated in accordance with the manufacturer's instructions. To provide for confirmation of the XRF results, ten percent of the samples analyzed with the XRF shall be submitted to a laboratory for analysis of total lead and cadmium. The laboratory samples shall be placed in appropriate laboratory containers and shipped under chain-of-custody protocol. Copies of all analytical data reports shall be provided to EPA. After all analytical data are available and the laboratory and XRF data are validated, the results shall be summarized and included in a Data Evaluation Report and submitted to EPA. Data assessment and comparison of laboratory results to the XRF shall be conducted within five days of receipt of each individual sample result from the laboratory. The Respondents shall notify EPA immediately if the data evaluation indicates XRF data outside acceptable limits as defined in the Quality Assurance Project Plan.

The respondents shall transmit a copy of all sampling data and field sheets depicting the sample locations to the individual property owners within 30 days of the sampling. The respondents shall also provide copies of the information sent to the property owners to EPA.

### **3.0 Non-time Critical Removal Actions**

Respondents shall undertake the NTC removal actions discussed in this Section where the

results of the Removal Site Evaluation or additional sampling document residential yards or areas where children congregate with soil exceeding the specified action levels in the Granby Subdistrict. The NTC removal actions shall be performed by Respondents in accordance with the schedule of activities presented in Section 5.0 of this SOW and the Action Memorandum prepared by the EPA.

Soils in the individual residential yard quadrants or zones where a composite sample exceeds a concentration of 400 milligrams per kilogram (mg/kg) lead or 75 mg/kg cadmium will be excavated and removed. Yards where only the drip zone samples exceed the action levels need not be addressed as part of this removal action. In properties where at least one quadrant or zone requires excavation, and the drip zone also exceeds action levels, the drip zone will be excavated along with the soils in the quadrant or zone exceeding action levels. The drip zone shall be sampled at all properties requiring cleanup of at least one yard quadrant or front or back yard zone, where it was not previously sampled. Soils in areas where children congregate (e.g. daycare centers, school yards, parks) and the concentration of lead exceeds 400 milligrams per kilogram (mg/kg) or the concentration of cadmium exceeds 75 mg/kg will be excavated and removed.

Properties with soil concentrations exceeding action levels will be excavated to a maximum depth of 12 inches in two 6-inch lifts. The excavation will be conducted with light excavating machinery, such as skid loaders, small backhoes, and hand tools. If after excavating the first 6-inch lift the soil concentrations still exceed action levels, a second 6-inch lift will be removed. If soils at a depth of 12 inches still exceed the action level concentration, a brightly colored heavy plastic barrier material (commonly known as construction or snow fence) will be placed over the bottom of the excavation as a warning to the property owners that contaminated soils remain beneath the barrier.

After removing the soils from the affected area or areas and placing the warning barriers where required, the excavated soils will be replaced with clean soils. Clean soils are soils that have been analyzed for lead and cadmium and results indicate that the lead concentration is below 240 mg/kg and the cadmium concentration is below 25 mg/kg. The areas will be backfilled to their original grades by placing and lightly compacting the clean soils in the excavation. The lawn vegetation will be replaced by hydro-seeding. The property owners will be responsible for lawn watering and maintenance. Excavation crews will work around trees, shrubs, and ornamental plantings that owners wish to save to the extent practical. EPA or the Respondents will not be responsible for replacing trees, shrubs, or gardens. Property owners will be responsible for replacing trees, shrubs, or gardens removed from their property. The Respondents shall be responsible for replacing or repairing any property damage caused during the cleanup; such as structures, sidewalks and driveways, and utilities. Additionally, the Respondents shall be responsible for removal of trees and shrubs that die as a result of the cleanup.

A sample of the soil used to backfill the excavations will be obtained from each 5,000 cubic yards of soil and submitted for laboratory analysis for the compounds listed on Table 1.

The analytical results for each sample shall be submitted to EPA for approval prior to use in the residential yards.

Garden soils in any yard that exceeds 400 mg/kg lead or 75 mg/kg cadmium (based on discrete samples) will be excavated to a maximum depth of 24 inches. Gardens exceeding these action levels may be addressed by excavation and construction of raised beds, so long as a full 24 inches of clean soil is provided.

At the completion of each property, the respondents shall prepare a field sheet drawing showing, at a minimum, the extent of excavation and backfill, and the location of any barriers placed in the excavation prior to backfilling to delineate the extent of subsurface contamination below the excavation. The Respondents shall transmit a copy of the excavation field sheet drawing to the property owner within 30 days of completion of the property. The respondents shall also provide copies of the information provided to the property owners to EPA.

Excavated soils will be placed in the existing on-site repository that was previously constructed for the time-critical removal actions. Soils that exceed the Toxicity Characteristic Leaching Procedure (TCLP) limits for lead and/or cadmium will be stabilized prior to transportation to and placement in the repository. TCLP sampling will be conducted according to the requirements of SW-846-Chapter 9 (representative sampling for waste piles). A stabilization admixture similar to that used in the time-critical removal actions will be used for this non-time critical action. In August of 2001, Newton County agreed to the terms of a consent decree with EPA for the long-term maintenance of the repository and surrounding area. Under this consent decree, Newton County is required to place deed restrictions on the repository to prevent, among other things, disturbance of the soil at the repository. The required deed restrictions are expected to be in place in the near future.

At the conclusion of the non-time-critical removal actions, the repository will be graded and contoured to reduce erosion by the Respondents. The surface of the pile will be treated with phosphate to reduce the mobility of metals and the associated ecological risks. Then the pile will be vegetated with warm season grasses. The Respondents shall perform maintenance of the repository cover system, such as minor regrading, re-seeding, and fence repairs for a minimum of three years or until the vegetative cover becomes well established if longer than three years. Long-term maintenance beyond this requirement is expected to be minimal, and will be the responsibility of Newton County.

#### **4.0 Deliverables and Reporting Requirements**

The following reporting requirements shall be required as part of the NTC Removal Action.

##### **Sampling and Analysis Plan:**

The Sampling and Analysis Plan (SAP) shall discuss the objectives of the planned sampling activities, sampling locations, sampling equipment and procedures, chain of custody

procedures, quality assurance measures, and decontamination procedures. The SAP shall be prepared in accordance with current EPA guidance. EPA recognizes that Respondents drafted a SAP for the time-critical removal of soils and may, at their option, reference that document to fulfill this requirement.

Quality Assurance Project Plan:

The Quality Assurance Project Plan (QAPP) shall present the project organization and responsibilities, the data quality objectives for measurement, sampling procedures and quality control measures, sample custody, analytical methods with detection limits/quantitation limits, data validation and reporting, and other applicable items specified in current EPA Guidance. EPA recognizes that Respondents drafted a QAPP for the time-critical removal of soils and may, at their option, reference that document to fulfill this requirement.

Health and Safety Plan:

Health and Safety Plan (HSP) shall be prepared to provide for the protection of site workers, visitors, and citizens at or near the site and other areas where activities related to the RI take place. The HSP shall be consistent with the requirement of 29 C.F.R. 1910.120. EPA recognizes that Respondents drafted a Health and Safety Plan for the time-critical removal of soils and may, at their option, reference that document to fulfill this requirement.

Backfill Analytical Data Reports:

These reports will contain the laboratory results of the samples obtained from the backfill soil for each 5,000 cubic yards of material. Sample location in the backfill source, if the samples are obtained in-situ, shall be documented.

Removal Action Plan:

The Removal Action Plan shall be prepared to discuss the logistical and technical approach to conducting the cleanup activities. At a minimum, the plan shall discuss the scope of the action, project organization, and operational approach. EPA recognizes that Respondents drafted a Removal Action Plan for the time-critical removal of soils and may, at their option, revise that document to incorporate the requirements and scope of this SOW to fulfill this requirement.

Data Evaluation Report:

This report will document and compare the laboratory analytical data to the XRF results for each paired set of samples. The report shall provide the relative percent difference (RPD) between each laboratory and corresponding XRF sample, as well as, the average RPD for all samples.

Removal Action Report:

This report shall, at a minimum, provide the following:

- Analytical results of backfill samples.
- Field sheet drawings, to approximate scale, of each property excavated documenting the extent and location of the excavation and backfill placement and the location of any

barrier material placed in the excavation. Pre- and post sampling results shall be included on each property field sheet. Owner's address and telephone number shall also be included.

- A summary of the number and location of the remediated properties.
- The volume of contaminated soil placed in the repository.
- All laboratory quality assurance data.
- All TCLP sample data collected for soil disposal.
- Owner information and documentation of access attempts for all denied access properties.
- An electronic data base containing, for each property remediated, all sample-analysis data collected, the date the remediation was completed, and the owner information.
- An electronic location map in ARCView format, compatible with existing EPA files for the site, showing the location of each property remediated, as well as, addresses, street names, and other reference information.
- A hard copy of the ARCView map.

Additionally, the Respondents shall add all soil sampling and soil cleanup data previously collected as a part of the site characterization and time critical removal activities to the electronic data base and map listed above.

Monthly Progress Reports:

These reports shall contain the following information:

- Number of properties completed during the month.
- Project personnel or contractor changes.
- Issues or problems encountered during the month.
- Resolution of issues or problems.
- Reference to the analytical data submitted to EPA.
- Contacts with local, state, and federal government officials and the media.

## 5.0 Schedule

The respondents shall comply with the following schedule for the NTC removal action:

| ACTION   | DUE DATE  |
|--|---|
| Respondents submit information on designated project coordinator to EPA                              | Within 10 days of the effective date of the AOC                                     |
| Respondents submit name and qualifications of contractor to perform the work                         | At least 20 days prior to field activities  |
| Respondents submit <b>Sampling and Analysis Plan</b>   | Within 20 days of the effective date of the AOC                                     |
| Respondents submit <b>Quality Assurance Project Plan</b>   | Within 20 days of the effective date of the AOC                                     |
| Respondents submit <b>Health and Safety Plan</b>   | Within 20 days of the effective date of the AOC                                     |
| Respondents submit <b>Removal Action Plan</b>  | Within 20 days of the effective date of the AOC                                     |
| Respondents submit name and qualification of any other contractors or subcontractors to perform work | At least 10 days prior to commencement of work                                      |
| Respondents notify EPA of field activity   | At least 10 days prior to field activity  |
| Respondents initiate NTC removal action for contaminated soils                                       | Within 10 days of EPA approval of Removal Action Plan                               |
| Respondents transmit soil sampling XRF data field sheets to property owner                           | Within 30 days of sampling  |
| Respondents provide excavation field sheets to homeowner   | Within 30 days of completion of the property  |
| Respondents provide analytical data to EPA   | Within 30 days of receipt from laboratory   |
| Respondents submit <b>Backfill Analytical Reports</b> to EPA   | Prior to backfilling properties   |
| Respondents submit <b>Data Evaluation Report</b> to EPA for review and approval*                     | Within 60 days of completion of field activities                                    |
| Respondents submit <b>Monthly Progress Reports</b> to EPA  | Monthly from the effective date of the AOC until EPA approves Removal Action Report |
| Respondents submit <b>Removal Action Report</b> to EPA   | Within 60 days of completion of field activities                                    |

\* The Respondents shall notify EPA immediately if the data evaluation indicates a problem with the XRF data outside of acceptable ranges established in the Quality Assurance Plan.

**Table 1**  
**Backfill Analytical Matrices and Methods**

| <b>Chemical Parameter</b>          | <b>Analytical Method</b>                       |
|------------------------------------|--|
| Volatile Organic Compounds         | SW-846 Method 8260B                            |
| Semivolatile Organic Compounds     | SW-846 Method 8270C                            |
| Pesticides and PCBs                | SW-846 Method 8081A & 8082                     |
| Target Analyte List Metals - total | SW-846 Method 3050/6000/7000 Series            |
| Cyanide - total                    | SW-846 Method 9010A                            |
| Extractable Petroleum Hydrocarbons | Iowa Dept. of Natural Resources Method TPH-OA2 |



## APPENDIX B

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

21 MAR 2002

#### ACTION MEMORANDUM

SUBJECT: Request for Removal Action at the Newton County Mine Tailings Site, Newton County, Missouri (Operable Unit #1 Soil Removal)

FROM: Ken Rapplean, On-Scene Coordinator  
Enforcement/Fund-Lead Removal Branch

THRU: Kenneth S. Buchholz, Branch Chief  
Enforcement/Fund-Lead Removal Branch

TO: Michael J. Sanderson, Director  
Superfund Division

Site ID#: 07RZ  
Category of Removal: Non-Time-Critical  
CERCLIS ID #: MOD981507585  
Nationally Significant/Precedent Setting: No

#### I. PURPOSE

The purpose of this action memorandum is to request approval and funding for a non-time-critical removal action of contaminated soils at the Operable Unit #1 part of the Newton County Mine Tailings Site (Site), Newton County, Missouri. The primary objective of this action is to eliminate or reduce ingestion exposure due to the presence of lead in the soils at approximately 100 residential locations at the Site. An Action Memorandum for removal of contaminated soils at the Operable Unit #2 part of the Site was previously signed on September 26, 2001, and is attached for reference.

#### II. SITE CONDITIONS AND BACKGROUND

##### A. Site Description

###### 1. Removal Site Evaluation

Newton County is located in an area of known historical mining, milling, and smelting operations. The Site includes portions of the former Tri-State Mining District

which was located in northeastern Oklahoma, southeastern Kansas, and southwestern Missouri. Numerous investigations and actions have been completed and are summarized in Paragraphs A.1.a-h.

a. 1986 Preliminary Assessment: Granby

Initial environmental assessments of the Site date to 1986, when the U. S. Environmental Protection Agency (EPA) collected ground water, soil, and sediment samples in areas surrounding Granby, Missouri (see attached Action Memorandum, Map-Attachment 1). Results of this assessment indicated the presence of cadmium, lead, and zinc significantly above background in all media sampled.

b. 1989 Site Inspection: Granby

The Missouri Department of Natural Resources (MDNR) conducted a Site Inspection (SI) in 1989, again targeting areas in and around Granby. Sampling during this assessment was limited to one surface water, one soil and three air samples; the data indicated the presence of low levels of lead in all media sampled.

c. 1995 Expanded Site Inspection: Granby, Wentworth, and Stark City

In July 1995, the EPA released a study entitled "Expanded Site Inspection Report for Newton County Mine Tailings Site." The objective of the study was to determine metals concentrations in tailings, ground water, sediment, and surface soil in and around three towns: Granby, Wentworth, and Stark City. The results of this study can be generally summarized as follows:

- **Tailings:** Twenty tailing samples were collected from 18 different piles in the three towns. Arsenic was detected as high as 11.8 milligrams per kilogram (mg/kg), with an average of 3.35 mg/kg; cadmium was detected as high as 196 mg/kg, with an average of 135 mg/kg; and lead was detected as high as 23,300 mg/kg, with a median of 398 mg/kg. Other inorganics were detected in the tailings, at concentrations generally below federal health-based action levels.
- **Ground water:** Nine water well samples were evaluated for inorganic contamination from the site area, including two municipal wells (Granby) and seven private wells. All wells evaluated were within several miles of Granby. None of the wells showed levels of contaminants above federal health-based action levels.
- **Sediment:** Nine sediment samples were collected from four different creeks, generally located within several miles of Granby. Arsenic was detected as high as 8.04 mg/kg, with an average of 4.04 mg/kg. Other inorganics were detected in the sediments, at concentrations generally below federal health-based action levels.

- **Surface soil:** A total of 14 residential soil samples were collected. Of these 14, nine composite samples were collected near tailings piles at a depth of one to two feet below ground surface. Five discrete samples were collected near a former smelter at a depth of six inches below ground surface. All samples were collected in the vicinity of Granby. Arsenic was detected as high as 11.3 mg/kg, with an average of 4.90 mg/kg; and lead was detected as high as 4,770 mg/kg, with a median of 523 mg/kg. Other inorganics were detected in the surface soils at concentrations generally below federal health-based action levels.

d. 1996 Activities: Spring City

In late 1995, a one-year-old child living in Spring City was found to have an elevated blood-lead level. The Missouri Lead Poisoning Prevention Program concluded that "drinking water was the only source identified" as causing the elevation. Because of this, the child's water supply was tested; results showed the presence of lead at 200 to 890 micrograms per liter (ug/l) and cadmium at 29 to 38 ug/l.

The EPA conducted additional soil and private drinking water well sampling in Spring City during April 1996. The results of this sampling effort can be generally summarized as follows:

- **Soil:** Thirty-three residential yards were sampled, typically four to five samples per residence, at depths of zero to two inches. Lead was detected as high as 3,878 mg/kg, with a median of approximately 250 mg/kg. No other inorganic compounds were screened.
- **Drinking water wells:** Forty private drinking water wells were sampled. Lead was detected as high as 53.7 ug/l, with an average of 9.9 ug/l; cadmium was detected as high as 314 ug/l, with an average (excluding the 314 ug/l reading) of 5.46 ug/l; and zinc was detected as high as 6,780 ug/l. Other inorganics were detected in the water wells, at concentrations generally below federal health-based action levels.

A Unilateral Administrative Order was issued to the Blue Tee Corporation and ASARCO, Inc. in July 1996 to provide bottled water to 12 residences in the Spring City area which had levels of lead, cadmium and/or zinc above removal action levels.

e. 1997/1998 Removal Site Evaluation and Engineering Evaluation/Cost Analysis (EE/CA)

An Administrative Order on Consent (AOC) was signed by the Blue Tee Corp. and ASARCO, Inc. in June 1997 to complete a Removal Site Evaluation (RSE) and EE/CA for the Granby and Diamond Mining Subdistricts in Newton County. The sampling effort extended from September to December 1997 and the draft RSE report was received in February 1998. Review of the report was completed and comments submitted. Additional work

was requested to include the sampling of soils around the former smelter area because the data indicated that some residences had soils that exceeded the time-critical action level for lead of 2,500 ppm and a day care facility exceeded 1,000 ppm. The EPA obtained access to additional residences which had not been sampled during the first effort. The results of the additional sampling were submitted in the revised RSE on September 10, 1998. Results indicate that 10 residences exceed the time-critical removal action level of 2,500 ppm of lead in the soils. The RSE was approved with comments on December 4, 1998, and a Removal Action Plan (RAP) was received, approved, and a soil removal at 14 residential locations was completed in October 1999. A soil repository was constructed in the Granby Subdistrict (just south of the city of Granby) under the Corrective Action Management Unit (CAMU) rule and all excavated soils were placed in the repository. Any soil not meeting the Toxicity Characteristic Leaching Procedure (TCLP) for lead was treated and stabilized prior to placement in the repository. A Notice of Public Availability to review and comment on the EE/CA was published in local newspapers in August 2001. No public comments were received.

f. 1998/1999 Removal Assessment

The EPA started a county-wide assessment to sample private ground water wells and residential yards to determine the impact that the previous mining activities have had. Sampling started in May 1998 and completed in February 1999. County-wide notices were distributed and a field office was established in the town of Granby until the end of February 1999. Over 250 residential yards have been screened for lead in the soil and over 210 residences have had their private water well sampled and analyzed for lead, cadmium and zinc. Soil screening results indicated that two residences exceeded the 2,500 ppm of lead in the soils outside of the AOC study area (they are in west-central Newton County in mining subdistrict number two). The soils in those two residential yards were removed during the soil removal action completed by the AOC respondents in 1999. At that time ground water results indicated that approximately 56 residences exceed the removal action level for lead, cadmium or zinc. Initially bottled water was supplied to 46 of those residences that agreed to accept the water in order to eliminate or reduce ingestion exposure due to the presence of lead, cadmium and/or zinc in their private drinking water wells. At this time 360 residences are receiving bottled water due to additional sampling completed in 2000 and 2001 by EPA and the county health department.

g. 2000/2001 Site Evaluation

EPA conducted field sampling activities as an extension to the sampling activities performed during the removal assessment that was completed by EPA and (in those mining subdistricts not covered by the AOC) for additional information for the EE/CA and RSA that was completed by the respondents under the AOC. The sampling of residential yards and private ground water wells in the Jasper County Overlap, Seneca-Spring City-Spurgeon, Stark City and Wentworth Subdistricts started in April 2000 and was completed in December 2000. Residential locations where the sample results showed that the drinking water levels for lead, cadmium or zinc exceeded removal action levels were provided bottled water under the

existing removal action memorandum and two amendments (dated 3/30/98, 4/14/98 and 8/8/01). Information gathered on the soils in the residential yards indicate that there are approximately 100 yards that exceeded 400 mg/kg of lead in the soil.

h. 2001/2002 Soil Removal

On September 26, 2001, EPA signed an Action Memorandum for a non-time-critical removal action in the Operable Unit #2 area which includes the Jasper County Overlap, Seneca-Spring City-Spurgeon, Stark City and Wentworth Subdistricts. The removal action started on October 29, 2001. There have been 100 residential locations completed. All excavated soils have been placed into the repository south of Granby. Approximately 12,000 cubic yards of material has been placed in the repository. Approximately 1,700 tons of the material taken to the repository had to be treated to eliminate the potential for the leaching of lead from the material.

2. Physical Location

Newton County is located in southwestern Missouri and includes towns or cities which have some historical connection to mining-, milling- or smelting-related operations. Based upon current information, towns or cities which are considered part of the Site include Granby (population 1,908), Wentworth (population < 100), Stark City (population < 100) and Spring City (population approximately 200). Other areas may be added as future information becomes available.

3. Site Characteristics

Lead and zinc were mined in Newton County from approximately 1850 to 1950. Approximately 160 mining operations were located in the vicinity of Granby; rather than one owner operating a mine covering a large area, the Granby area had many one- and two-person mining operations on small subleased mining plots. The area is characterized by mine shafts, tailings piles, and chat piles.

4. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant

Hazardous substances as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, have been detected in the ground water, soils and mining wastes at the site. These include cadmium, lead and zinc. Sampling has confirmed that high levels of lead are in the surface soils in several residential yards. Those levels pose a threat to children playing in the yards.

## 5. National Priorities List (NPL) Status

The Site is not currently on the NPL. However, the Agency is in the process of preparing an HRS package to propose this site to the NPL. This would enable the Agency to conduct remedial activities necessary to permanently address the contaminated drinking water concerns.

### B. Other Actions to Date

#### 1. Previous Actions

The Newton County Health Department and the Missouri Department of Health (MDOH) have been conducting blood-lead testing for children for the last several years. Many children tested have blood-lead levels greater than are acceptable for their age. See Section II.A for discussion of other actions conducted at the site.

#### 2. Current Action

Blood-lead testing in the area continues. The expanded sampling of soil and ground water in the affected areas has been completed.

### C. State and Local Actions to Date

#### 1. State and Local Actions to Date

The EPA is the lead agency for the project. The MDNR has been actively involved with and has provided support to the EPA throughout the project. Health agencies involved to date have been the Newton County Health Department, the Missouri Lead Poisoning Prevention Program, the MDOH, and the Agency for Toxic Substances and Disease Registry (ATSDR). The Newton County Health Department will be the primary contact for public questions concerning lead and its health effects and will aid EPA as it continues to distribute bottled water.

#### 2. Potential for State/Local Response

MDNR and the various health agencies are expected to remain involved in a variety of future activities at the Site, including blood-screening, health education and health assessments.

## III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Section 300.415(b) of the National Contingency Plan (NCP) provides that the EPA may conduct a removal action when it determines that there is a threat to human health or the

environment based on one or more of the eight factors listed in Section 300.415(b)(2). The factors which justify a removal action at this site are outlined below.

A. Threats to Public Health or Welfare

**Actual or potential exposure of populations to hazardous substances.**

Elevated concentrations (greater than 400 ppm) of lead have been found in approximately 100 residential yards within Operable Unit #1. Children playing in and around the contaminated areas of the yards have the highest potential to be exposed. Additional sampling to delineate areas around the contaminated yards may indicate other yards affected by the contamination.

**High levels of hazardous substances in soils, largely at or near the surface that may migrate.**

Lead has been detected in surface soils above the proposed action level. Lead-contaminated soils may migrate via airborne dusts, surface runoff, percolation into ground water and by children transporting soils/dusts into their homes after playing in the affected areas.

**IV. ENDANGERMENT DETERMINATION**

The actual release of a hazardous substance at this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

**V. PROPOSED ACTIONS AND ESTIMATED COST**

A. Proposed Actions

1. Proposed Action Description

Past sampling activities at this site have documented the release of a hazardous substance but have not necessarily defined the total areal extent. Removal of soils in Operable Unit #1 will be initiated and additional sampling of adjacent residences will also be completed to determine if those residences will need any removal action. This action will be consistent with the removal action taken at the Operable Unit #2 area.

Excavation of contaminated soils (generally up to approximately 100 feet away from each house or, at a minimum, within established play areas for children such as around swing sets, sandboxes, etc.) to below applicable action levels, disposal of excavated soils and restoration of the excavated areas will be completed at each residence. The following criteria will be followed during the excavation activities:

**For residential yards:**

From 0 to 12 inches, excavation will proceed until a 400 ppm total lead cleanup standard is met.

At 12 inches, if levels exceed 400 mg/kg lead, a permanent physical barrier (heavy orange plastic mesh) will be placed at the interface between the contaminated soil and clean backfill.

**For gardens:**

From 0 to 24 inches, excavation will proceed until a 400 ppm total lead and a 25 ppm cadmium cleanup standard is met.

The excavated areas will have a clean backfill placed, compacted and graded to pre-excavation contours and the grass-covered areas will be stabilized by the process of hydroseeding. A pre-excavation plan will be agreed upon by the resident and EPA at each residence as to what area(s) will be excavated and what trees, shrubs, etc. will be removed or will remain. EPA will not replace any trees, shrubs, garden crops, etc. that the resident requests to be removed. EPA will temporarily remove any fence lines, etc. necessary for equipment access during the removal and backfilling and will reinstall the fence, etc. that was removed.

The excavated soils from the residences will be transported to the repository south of Granby. The soil will have the TCLP test run on it and all soils failing the test will be treated until the soil passes the test prior to being placed in a permanent location at the repository. At the completion of the non-time-critical removal actions the repository will be graded and contoured to reduce erosion and a vegetated cover will be established.

The proposed action will reduce the potential for human exposure to lead through contact with soils and will reduce the potential for lead transported off site by surface runoff. Monitoring and control measures will be implemented to ensure that removal activities do not expose nearby populations and site workers to harmful levels of contaminants. Air monitoring will be conducted during removal activities to ensure that airborne dusts do not contain harmful levels of lead.

**2. Contribution to Remedial Performance**

The fund-lead actions proposed in this Action Memorandum will not impede any future remedial plans or other response. This is consistent with any long-term remedy in that it fully addresses the direct contact threat posed by lead-contaminated yards.

**3. Action/Cleanup Level**

Soils contaminated with lead above 400 ppm will be excavated, treated if TCLP analysis fails and disposed of at the repository. In garden areas, soils with lead above

400 ppm and cadmium above 25 ppm will be excavated, treated if TCLP analysis fails and disposed of at the repository. These levels are consistent with the revised interim guidance for lead-contaminated Superfund sites, Office of Solid Waste and Emergency Response (OSWER) Directive 9355.4-12, and has been concurred on by ATSDR.

All site-sampling activities for comparison to the action levels will be conducted in accordance with the approved Quality Assurance Project Plan.

4. Engineering Evaluation/Cost Analysis (EE/CA)

An EE/CA has been published and a federal register notice was published providing the public an opportunity for comments. The EE/CA is considered finalized since no comments were received during the comment period.

5. Applicable Relevant and Appropriate Requirements (ARARs)

Section 300.415(i) of the NCP provides that fund-financed removal actions under Section 104 of CERCLA shall, to the extent practical considering the exigencies of the situation, attain ARARs under federal environmental or facility-citing laws.

Any lead-bearing wastes exceeding the TCLP regulatory threshold will undergo treatment on site in accordance with the substantive requirements of the Resource Conservation and Recovery Act (RCRA) prior to being placed in its permanent location at the repository.

A copy of this Action Memorandum will be provided to state personnel. EPA received no comments from the state on the existing Action Memorandum that had been sent to them on September 20, 2001.

6. Project Schedule

Response activities are anticipated to begin sometime in the spring of 2002. The activities will probably extend into the summer of 2002.

B. Estimated Costs

These costs do not include intramural costs. Refer to the Enforcement Addendum for intramural direct and indirect costs. The EPA direct and indirect costs, although cost recoverable, do not count toward the total removal project ceiling for this removal action.

The costs associated with the removal action are estimated as follows:

Extramural Costs:

|                                   |                   |
|-----------------------------------|-------------------|
| Removal Clean-up Contractor Costs | \$1,040,000       |
| START Contractor Costs            | \$ 180,000        |
| 10% Costs Contingency             | <u>\$ 244,000</u> |
| Subtotal Extramural Costs         | \$1,464,000       |

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action will continue to potentially expose residents, particularly children, to the contaminated soils exceeding the federal action levels in their residential yards.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

See attached Confidential Enforcement Addendum for this Site. For NCP consistency purposes, it is not a part of this Action Memorandum.

IX. RECOMMENDATION

This decision document represents the selected removal action for the contaminated soils at residential yards in the Diamond and Granby Mining Subdistricts of the Newton County Mine Tailings Site in Newton County, Missouri. The removal action was developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site.

Conditions at the Site meet NCP Section 300.415(b) criteria for a removal action and I recommend your approval of the proposed removal action. The removal project ceiling is \$1,464,000 which comes from the Regional Removal Allowance.

Approved:

*Michael J. Sanderson, Director*  
Michael J. Sanderson, Director  
Superfund Division

*3/21/02*  
Date

## ENFORCEMENT ADDENDUM

This enforcement addendum to the Request for Removal Action at the Newton County Mine Tailings Site, Newton County, Missouri (Operable Unit #1 Soil Removal), states the costs associated with this non-time-critical removal action including the indirect rate of 56.29%. The total cost for this removal action including the intramural costs of \$874,098 is \$2,338,098.

We have included the indirect amount here in this Enforcement Addendum in order to give a more complete picture of the costs associated with this time-critical removal.

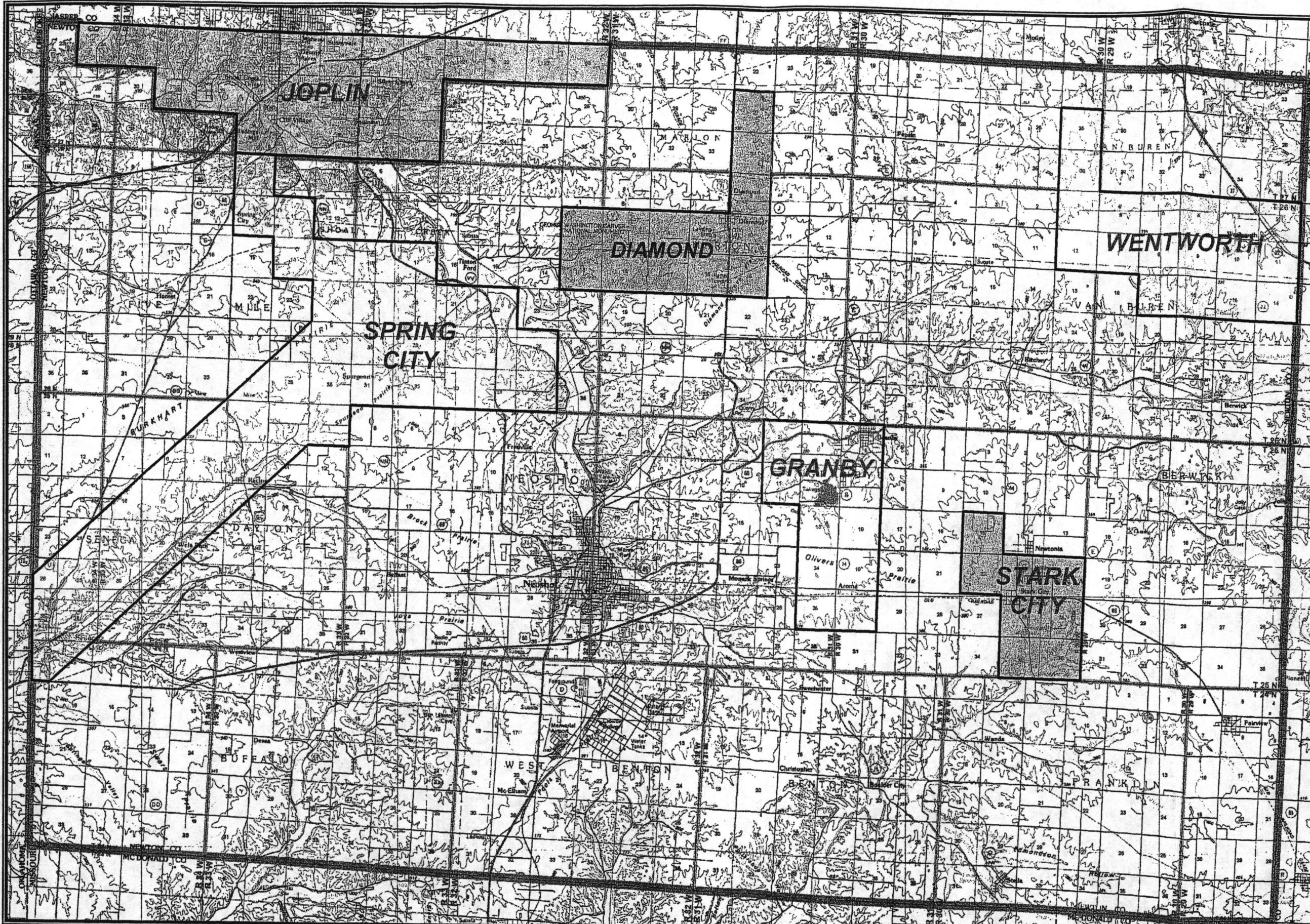
The costs including the new indirect rate costs are broken out as follows:

### Extramural Costs

|                                   |                   |
|-----------------------------------|-------------------|
| Removal Clean-up Contractor Costs | \$ 1,040,000      |
| START Contractor                  | \$ 180,000        |
| Contingency                       | <u>\$ 244,000</u> |
| <br>Total Extramural Costs        | <br>\$ 1,464,000  |

### Intramural Costs

|                            |                        |
|----------------------------|------------------------|
| EPA Direct Costs           | \$ 32,000              |
| EPA Indirect               | <u>\$ 842,098</u>      |
| <br>Total Intramural Costs | <br>\$ 874,098         |
| <br>TOTAL Project Ceiling  | <br><u>\$2,338,098</u> |



NEWTON COUNTY MINING SITES, MINING DISTRICTS

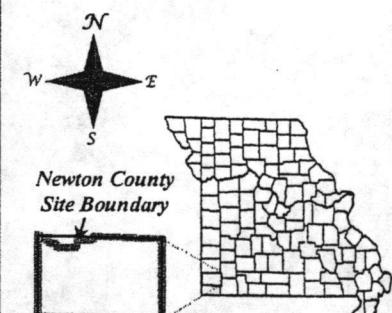
- 1. Granby District
- 2. Spring City-Spurgeon-Seneca-Racine-District
- 3. Diamond District
- 4. Wentworth District
- 5. Stark City District
- 6. Joplin District (not included in this report)

ADAPTED FROM:

— U.S. Geological Survey  
1:100,000-scale metric topographic map, 30 x 60 minute quadrangle of Neosho, Missouri-Oklahoma-Kansas 36094-E1-TM-100, 1986

SCALE:

1 inch = 1.33 miles



Newton County Mining Sites  
Newton County, Missouri

**FIGURE 1**  
Mining District Location Map

**DYNAMAC**  
CORPORATION  
Environmental Services