



SUPERFUND FACT SHEET

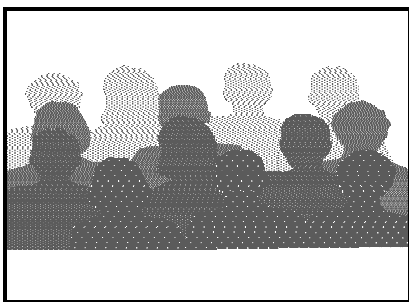
PROPOSED PLAN FOR REMEDIAL ACTION AT THE ROSS METALS SUPERFUND SITE

Rossville, Tennessee

November 1998

This fact sheet will provide:

- ! An overall review of the Site
- ! The results of the Remedial Investigation
- ! Possible health risk posed by the Site
- ! A summary of treatment technologies
- ! A summary of the Feasibility Study
- ! A presentation of EPA's preferred Alternative
- ! Announcement of Public Comment Period
- ! Places to get information



PUBLIC MEETING

DATE: November 30, 1998

TIME: 6:30 p.m.

LOCATION:

**Rossville Christian Academy
280 High Street
Rossville, Tennessee**



INTRODUCTION

This Proposed Plan Fact Sheet is issued to describe the alternatives that the U.S. Environmental Protection Agency (EPA) has considered for the cleanup at the Ross Metals *National Priorities List* (NPL) Site located in Rossville, Tennessee. This plan presents an evaluation of the cleanup alternatives, including the alternative preferred by EPA. The cleanup alternatives for contaminated soils, wetlands, landfill waste, and buildings are summarized in this Fact Sheet and are described in greater detail in the *Remedial Investigation (RI)* and *Feasibility Study (FS)* reports. The RI and FS reports are more complete sources of information

and are part of the *Administrative Record*. The Administrative Record consists of technical reports and reference documents used by EPA to develop the *Proposed Plan*. These documents may be found in the information repository located at the Rossville City Hall in Rossville, Tennessee.

Based on Site information, EPA has divided the Site into *Operable Units* or cleanup phases, with the source being the first Operable Unit and the ground-

Note: Words that appear in the glossary on page 10, are in *italics* the first time they appear in the body of this fact sheet.

water being the second. This has been done to begin cleanup of the contaminated source material, while continuing to evaluate potential groundwater contamination. Operable Unit No. 1 will address the contaminated soils, landfill waste, wetlands and buildings. Operable Unit No. 2 will address the potential cleanup of groundwater contamination.

The Ross Metals RI/FS was prepared by CDM Federal Programs Corporation, under contract with EPA. The alternative EPA prefers for OU #1 represents a preliminary decision, subject to public comment.

Section 117(a) of the *Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980*, as amended by the *Superfund Amendments and Reauthorization Act (SARA) of 1986*, requires public notice and a brief analysis of the EPA preferred alternative for Site remediation.

EPA encourages the public to submit written comments on all alternatives presented in this plan. Please see page 9 for more information on where to submit written comments. EPA will consider public comments as part of the final decision-making process for selecting the cleanup remedy for the Site.

SITE BACKGROUND

The Ross Metals Site (herein after referred to as "the RM site" or "the site") operated as a secondary lead smelter from 1978 to 1992, during which the facility processed spent lead-acid batteries, lead dross, lead scrap, and other lead bearing material into reusable lead alloy. The 13.7 acre site is located in a rural and residential area of Rossville, Fayette County, Tennessee. An unlined landfill containing about 10,000 cubic yards (CY) of *blast slag* is located in the northern portion of the site. In addition, about 6,000 CY of stockpiled slag is stored on site in several deteriorating buildings. Lead-contaminated surface soil is located throughout the site, and lead-contaminated subsurface soil is present in isolated portions of the site.

The purpose of the Ross Metals RI/FS is to document the nature and extent of contamination to develop and evaluate remedial alternatives, as appropriate.

Results of sampling investigations were used to develop this RI/FS and show that lead-contaminated surface soil is present across the site and in the wetlands north and east of the site. Lead concentrations in most surface soil and sediment samples collected throughout the site exceeded 400

ppm. In addition, aluminum, antimony, arsenic, barium, cadmium, copper, iron, manganese, selenium, and vanadium were detected above their cleanup levels.

In addition, lead concentrations ranging from 1,000 ppm to 52,000 ppm were detected in subsurface soils in two isolated locations at the site; east of the wrecker building, and southeast of the truck wash. Blast slag samples contained total lead concentrations ranging from 18,500 to 94,800 ppm. Total lead and lead *leachate* concentrations in a floor wipe sample collected from the furnace and raw materials refinery building were 14,700 ppm and 574 ppm, respectively.

Sampling results of surface water samples and sediments revealed concentrations of several inorganic compounds that exceeded background concentrations. Significant inorganic contaminants included antimony, arsenic, cadmium, iron, lead, and manganese. Lead concentrations in surface water were found as high as 1,600 ppb. Lead concentrations in sediment were found as high as 98,100 ppm.

SUMMARY OF SITE RISKS

As part of the RI/FS, an analysis was conducted to estimate the human health or environmental problems that could result if contamination at the Site is not cleaned up. This analysis, known as a Baseline Risk Assessment, focused on the current and future human health and environmental effects from long-term direct exposure to the contaminants found at the Site.

EPA has concluded that the major risks to human health at the site would be incidental ingestion of contaminated soil. The contaminant of greatest concern in these media is lead which causes well known health effects, especially in young children. At the present time, no unacceptable exposure is occurring because no one is drinking water from the contaminated aquifer and no one is in regular contact with contaminated soil.

Additional pathways were evaluated or considered, but the current and future impacts were found to be within acceptable risk levels. For example, direct contact exposure to contaminants in soil, sediment, and surface water was examined, but the risks associated with these pathways were found to be negligible. Similarly, possible exposure to surface water via inadvertent ingestion while wading and exposure to soil via inhalation to dust were examined and found to be unimportant in terms of potential health effects.

SCOPE AND ROLE OF RESPONSE ACTION

As previously stated, this response action addresses only the cleanup of the contaminated soils, buildings, and wetlands. The cleanup of the source materials is proposed to prevent exposure to the contaminated source materials and prevent further contamination of groundwater and surface water.

The preferred alternative will address:

- Waste Slag (landfilled and stockpiled)
- Contaminated soil (in facility area and landfill area)
- Buildings
- Demolition debris (pavement)
- Contaminated sediment (in wetlands)

EPA generally expects to use treatment to address principal threats posed by a site, wherever practicable. Principal threat wastes are those source materials considered highly toxic or mobile that cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur. For the Ross Metals Site, principal threat wastes would conservatively include:

- 600 cubic yards of soil
- 8,200 cubic yards of sediment
- 6,000 cubic yards of stockpiled slag
- 10,000 cubic yards of landfilled slag

Based on new information or public comments, EPA in consultation with the State of Tennessee, may modify the preferred alternative or select another response action presented in the Proposed Plan and the FS Report. The public is encouraged to review and comment on all alternatives identified.

SUMMARY OF SOURCE MATERIAL ALTERNATIVES

This section summarizes the 6 source material alternatives that EPA evaluated.

Institutional controls (e.g., future land use restrictions, local zoning ordinances, or permitting requirements) and security fencing are common components to all the alternatives that include capping (S-2, S-3, S-4, S-5A, S-6A and S-6B).

The alternatives that leave contamination on Site (S-1, S-2, S-3, S-4, S-5A, S-6A, and S-6B) would involve continued monitoring of the Site. EPA would assess the risks to human health and the environment every five years.

Alternative S-1

No Action

Under this alternative, no action would be taken to remedy the contaminated surface soil, slag, sediment, or other solid media.

Alternative S-2

Capping

This alternative includes the demolition of most of the on-Site pavement and buildings. The main office building and the pavement surrounding this building would remain on Site, and landfilled waste would remain in place. Contaminated soil beneath the pavement would be excavated and consolidated with the stockpiled slag, pavement, and building debris. This waste material would be disposed in an on-Site excavation that would extend from the existing landfill to about 375 feet south of the landfill. This disposal area would be about 400 feet wide and 8 feet deep, although it could be enlarged somewhat if necessary. A soil cushion layer, a *geosynthetic* liner; a soil cover, and topsoil with grass seeding would be placed over the buried contaminated material. The new landfill would cover about 6.7 acres.

Alternative S-3

Capping with Pavement in Place

Alternative 3 differs from Alternative 2 in that the waste is not disposed of in an excavation, but rather spread over the existing pavement and capped in place with the existing landfill. Alternative 3 includes the demolition of most of the on-Site buildings. The main office building would remain on Site, and the landfilled slag would remain in place. Contaminated soil from areas not covered by pavement would be excavated and consolidated with the stockpiled slag and building debris, and excavated wetland sediment. This material would be spread above the pavement that extends from the existing landfill to about 375 feet south of the landfill. A soil cushion layer, a geosynthetic liner, soil cover, and topsoil with grass seeding would be placed over the contaminated material. The new landfill would be about 6.7 acres.

Alternative S-4

Capping with Construction of /Above-Ground Disposal Cell

Alternative 4 differs from Alternatives 2 and 3 in that waste is not disposed of in the area of the existing pavement; instead, it is consolidated over the surface of the existing landfill and capped in place. This method would result in a disposal cell approximately 17 to 18 feet high throughout the

landfill area. This alternative includes the demolition of on-Site pavement and buildings. The main office building and the pavement immediately surrounding this building would remain on Site, and landfilled slag would remain in place. Contaminated soil beneath the pavement would be excavated and consolidated with the stockpiled slag, pavement, and building debris. A soil cushion layer, a geosynthetic liner, a soil cover, and topsoil with grass seeding would be placed over the contaminated material. The new landfill would be about 2.5 acres.

Alternative S-5

Excavation and On-Site Treatment with Solidification/Stabilization

Option A - On-Site Disposal of Treated Waste

Option A for Alternative 5 includes the decontamination and demolition of most of the on-Site pavement and buildings. The main office building and the pavement surrounding this building would remain on Site. The building debris and pavement would be decontaminated by steam/pressure cleaning. Contaminated soil throughout the Site, and buried slag in the landfill would be excavated and consolidated with the stockpiled slag. Contaminants within soil and slag would be physically bound or enclosed within a stabilized mass (solidification), or chemical reactions would be induced between a stabilizing agent and the contaminant to reduce its mobility (stabilization). Solidification/stabilization treatment technologies include the addition of cement, lime, pozzolan, or silicate-based additives or chemical reagents that physically or chemically react with the contaminant. Once treated and confirmed to be nonhazardous, the soil and slag would be consolidated with the pavement debris and disposed of in an on-Site excavation. The decontaminated building debris would be taken off Site to a metal recycling facility. The on-Site disposal area would extend from the northern boundary of the existing landfill to about 700 feet south of the landfill (100 feet north of the Site entrance) and would be about 250 feet wide and 8 feet deep. A soil cover and topsoil with grass seeding would be placed over the entire Site. The new landfill would be about four acres in size.

Option B - Off-Site Disposal of Treated Material

Option B for Alternative 5 is similar to Option A in that it also consists of the decontamination of most of the on-Site pavement and buildings and on-Site treatment. The main office building and the pavement immediately surrounding this building would remain on Site. The building debris and pavement would be decontaminated by steam cleaning. The decontaminated building debris would be taken off Site to a

metal recycling facility. Contaminated soil throughout the Site, and buried slag in the landfill would be excavated and consolidated with the stockpiled slag. Contaminants in soil and slag would be treated by solidification or stabilization. Option B differs from Option A in that after treatment and confirmation that the soil is nonhazardous, the treated soil and slag would be hauled off Site to a disposal facility. A soil cover and topsoil with grass seeding would be placed over the entire site.

Alternative S-6

Option A - Capping with Excavation and OnSite Treatment of Principal Threat Waste

Alternative 6 is similar to Alternative 5 in that it also includes the excavation and treatment of contaminated material via solidification/stabilization. However, Alternative 6 differs from Alternative 5 in that treatment is limited to only that material that is considered a principal threat. As previously stated, principal threat waste includes the landfilled and stockpiled slag, and approximately 500 cubic yards of soil.

Option A for Alternative 6 includes the demolition of most of the on-Site buildings. The main office building would remain on Site. The building debris and pavement would be decontaminated by steam/pressure cleaning. Principal threat wastes would be excavated and consolidated with the stockpiled slag. Contaminants in the principal threat waste would be treated by solidification or stabilization.

Contaminated soil from areas not covered by pavement, and non-principal threat landfill soil would be excavated for and placed in an on-Site landfill along with the treated principal threat waste. This waste (and treated) material would be disposed in the excavated landfill area (450 x 250 x 5 ft. deep). A soil cushion layer, a geosynthetic liner, a soil cover, and topsoil with grass seeding would be placed over the entire site. The new landfill would be about 6.7 acres in size.

Option B - Off-Site Disposal of Treated Principal Threat Waste

Option B is similar to Option A except that treated principal threat waste is disposed in an off-Site landfill rather than being capped on Site with the low-level threat waste. Like Option A, Option B for Alternative 6 includes the demolition of most of the on-Site buildings. The main office building would remain on Site. The building debris and pavement would be decontaminated by steam/pressure cleaning. On Site contaminated soil considered principal threat waste, and

buried slag in the landfill would be excavated and consolidated with the stockpiled slag. Contaminants in soil and slag would be treated by solidification or stabilization. Contaminated soil from areas not covered by pavement, and non-principal threat landfill soil would be excavated for placement in an on-Site landfill. This low-level threat waste material would be disposed in the excavated landfill area (450 x 250 x 5 ft deep). A soil cushion, a geosynthetic liner, a soil cover, and topsoil with grass seeding would be placed over the entire Site. The new landfill would be about 6.7 acres in size.

SUMMARY OF WETLAND ALTERNATIVES

This section summarizes the three wetland alternatives that EPA evaluated.

Institutional controls (e.g., future land use restrictions, local zoning ordinances, or permitting requirements) are included as components for alternatives W-1 and W-2.

Each of the alternatives include a site monitoring program.

Alternative W-1

No Action

Under this alternative, no remedial action would be taken with respect to the wetlands. A monitoring program would be implemented to address wetland sediments, surface water and associated uptake by biota utilizing the affected area. The monitoring program would be developed in order to allow for regulators to assess the migration of the contaminants from the wetlands and determine if additional action is necessary. The monitoring program would take place on a yearly basis and an EPA evaluation conducted every five years.

Alternative W-2

Institutional Controls and Creation of Off-Site Wetlands

Under this alternative, a cap consisting of at least one foot of natural soil would be placed over the 5.7 acres of contaminated wetland sediment and graded evenly. The final component of this alternative is the creation of an off-Site wetlands to mitigate the loss (due to contamination) of the Site wetlands. The purpose of the off-Site creation of wetlands is to match the functional value of the Ross Metals Site wetlands where sediment is contaminated greater than 800 ppm - approximately 5.7 acres. The creation of an off-Site wetlands under this alternative would involve the determination of the functional value of the Site wetlands; acquisition of an appropriate type and

area of land to create the off-Site wetlands; and vegetation of the off-Site land to match or better the functional value of the Site wetlands.

Alternative W-3

Excavation and Revegetation/Restoration of Wetlands

Option A - Regrading with Clean Fill

Alternative 6 involves the excavation of contaminated wetland sediments to a depth of one foot, and under Option A, replacing that material with clean soils. Excavated areas will be backfilled to the existing grade and revegetated according to the Wetlands Revegetation Plan developed for the Site wetlands. Maintenance plans to eliminate the intrusion of less desirable species and to promote success would be developed and Site monitoring would also be required. Excavated sediments would be stockpiled with contaminated surface soils and final disposition of the contaminated wetlands sediments would follow the Source Material Alternative selected for surface soils. In excavating the approximately 5.7 acres of sediment with lead concentrations greater than 800 ppm to a depth of one foot; approximately 9,300 cubic yards of contaminated sediment would be generated. Approximately 8,200 cubic yards of the excavated sediment would be considered principal threat waste and 1,100 cubic yards would be considered low-level threat waste.

Monitoring would be required to assess the effectiveness of the cleanup action.

Option B - Regrading with Biosolid Compost Material

Option B is similar to Option A except that excavated areas would be backfilled with a biosolid compost material rather than clean fill. The compost would serve as the fill material, a metal-binding material and as a source of fertilizer to encourage revegetation/restoration.

As is the case for Option A, excavated sediments would be stockpiled with contaminated surface soils and final disposition of the contaminated wetlands sediment would follow the Source Material Alternative selected for surface soils. In excavating the approximately 5.7 acres of sediment with lead concentrations greater than 800 ppm to a depth of one foot; approximately 9,300 cubic yards of contaminated sediment will be generated. Approximately 8,200 cubic yards of the excavated sediment would be considered principal threat waste and 1,100 cubic yards would be considered low-level threat waste.

EVALUATION OF ALTERNATIVES

The EPA preferred alternatives for the Ross Metals Superfund Site, Operable Unit #1 is Source Materials Alternative S-5B and Wetlands Alternative W-3B. Based on current information, these alternatives provide the best balance of the nine criteria that EPA uses to evaluate alternatives. These criteria are described on the next page. The

Evaluation of Cleanup Alternatives Tables on pages 7-8 provide an analysis and comparison of the alternatives considered. The following information is regarding two of these criteria, State of Tennessee and community acceptance, that is not fully addressed on the evaluation table.

State of Tennessee Acceptance

The State of Tennessee has assisted

EPA in the review of reports and Site evaluation. The State has tentatively agreed with the proposed remedy and is awaiting public comment before final concurrence.

Community Acceptance

Community acceptance of the various alternatives will be evaluated during the 30-day public comment period and will be described in the Record of Decision (ROD) for the Site.

CRITERIA FOR EVALUATING REMEDIAL ALTERNATIVES

EPA always uses the following nine criteria to evaluate alternatives identified in the Feasibility Study. The remedial alternative selected for a Superfund site must achieve the two threshold criteria as well as attain the best balance among the five evaluation criteria. The nine criteria are as follows:

THRESHOLD CRITERIA

Overall Protection of Human Health and the Environment: Degree to which each alternative eliminates, reduces, or controls threats to public health and the environment through treatment, engineering methods or institutional controls.

Compliance with Applicable or Relevant and Appropriate Requirements (ARARs): Alternatives are evaluated for compliance with all state and federal environmental laws and regulations and are determined to be applicable or relevant and appropriate to the site conditions.

EVALUATING CRITERIA

Cost: The benefits of a particular remedial alternative are weighed against the cost.

Implementability: Technical feasibility (e.g., how difficult the alternative is to construct and operate) and administrative ease (e.g., the amount of coordination with other government agencies that is needed) of a remedy, including the availability of necessary materials and services.

Short-Term Effectiveness: The length of time needed to implement each alternative and the risks that may be posed to workers and nearby residents during construction and implementation.

Long-Term Effectiveness: The ability to maintain reliable protection of public health and the environment over time once the cleanup goals have been met.

Reduction of Toxicity, Mobility, and Volume: Degree to which an alternative reduces (1) the harmful nature of the contaminants, (2) their ability to move through the environment, and (3) the volume or amount of contamination at the site.

MODIFYING CRITERIA

State Acceptance: EPA requests state comments on the Remedial Investigation and Feasibility Study reports, as well as the Proposed Plan, and must take into consideration whether the state concurs with, opposes, or has no comment on EPA's preferred alternative.

Community Acceptance: To ensure that the public has an adequate opportunity to provide input, EPA holds a public comment period and considers and responds to all comments received from the community prior to the final selection of a remedial action.

EVALUATION OF SOURCE MATERIAL CLEANUP ALTERNATIVES

Alternative	Overall Protection of Human Health and Environment	Compliance with ARARs ¹	Reduction of Toxicity, Mobility and Volume (TMV)	Short-Term Effectiveness	Implementability	Present Net Worth (*w/wetlands)	Ranked Preferable Alternative
S-1 -- No Action	NO	NO	Does not affect TMV.	Does not achieve goals ² 0 years	Routine monitoring. Readily implemented.	\$100,247	8
S-2 -- Capping	YES	YES	Toxicity and volume unchanged. Mobility significantly reduced. Does not meet expectation for treatment.	Goals achieved. Protective equipment required. Noise nuisance. 6 months	Technology readily available and constructed. Capping in a floodplain and wetlands.	\$1,712,412 \$1,735,804*	7
S-3 – Capping with Pavement in Place	YES	YES	Toxicity and volume unchanged. Mobility significantly reduced. Does not meet EPA expectation for treatment.	Goals achieved. Protective equipment required. Noise nuisance. 6 months	Technology readily available and constructed. Capping in a floodplain and wetlands.	\$1,430,411 \$1,453,803*	5
S-4 -- Capping with Construction of Above-Ground Disposal Cell	YES	YES	Toxicity and volume unchanged. Mobility significantly reduced. Does not meet EPA expectation for treatment.	Goals achieved. Protective equipment required. Noise nuisance. 6 months	Technology readily available and constructed. Capping in a floodplain and wetlands.	\$1,481,865 \$1,506,847*	6
S-5A -- Excavation and On-Site Treatment with Solidification/Stabilization and On-Site Disposal	YES	YES	Toxicity and mobility virtually eliminated. Volume may increase Meets EPA expectation for treatment.	Goals achieved. Protective equipment required. Noise nuisance. 6 months	Technology readily available. Moderately complex to implement. Capping in a floodplain.	\$4,244,992 \$4,907,274*	4
S-5B -- Excavation and On-Site Treatment with Solidification/Stabilization and Off-Site Disposal	YES	YES	Toxicity and mobility virtually eliminated. Volume may increase Meets EPA expectation for treatment.	Goals achieved. Protective equipment required. Noise nuisance. 6 months	Technology readily available. Moderately complex to implement.	\$6,181,160 \$7,477,199*	1
S-6A -- Capping with Excavation and On-Site Treatment and On-Site Disposal	YES	YES	Toxicity and mobility virtually eliminated. Volume may increase Meets EPA expectation for treatment.	Goals achieved. Protective equipment required. Noise nuisance. 6 months	Technology readily available. Moderately complex to implement.. Capping in a floodplain.	\$2,729,543 \$3,175,137*	2
S-6B – Capping with Excavation and On-Site Treatment and Off-Site Disposal of Treated Principal Threat Waste	YES	YES	Toxicity and mobility virtually eliminated. Volume may increase Meets EPA expectation for treatment.	Goals achieved. Protective equipment required. Noise nuisance. 6 months	Technology readily available. Moderately complex to implement. Capping in a floodplain.	\$4,013,508 \$4,936,044*	3

Notes: ¹ ARARs - Applicable or Relevant and Appropriate Requirement; ² Goals (prevent human contact and further degradation of groundwater).

EVALUATION OF WETLANDS CLEANUP ALTERNATIVES							
Alternative	Overall Protection of Human Health and Environment	Compliance with ARARs ¹	Reduction of Toxicity, Mobility and Volume (TMV)	Short-Term Effectiveness	Implementability	Present Net Worth	Ranked Preferable Alternative
W-1 – No Action	NO	NO	No reduction of TMV	Does not achieve goals. ----- 0 years	Routine monitoring. Readily implemented.	\$10,247	4
W-2 – Capping w/Clean Fill and Off-Site Creation of Wetlands	Potentially	NO	No reduction in toxicity or volume. Reduction of mobility. Does not meet EPA expectation of treatment.	Protective equipment required. Noise nuisance from heavy equipment. ----- 6 months	Technology readily available and constructed. Capping in a floodplain and wetland.	\$414,881	3
W-3A – Excavation and Revegetation/Restoration of Wetlands and Regrading w/Clean Fill	YES	YES	TMV virtually eliminated.	Protective equipment required. Noise nuisance from heavy equipment. ----- 6 months	Technology readily available and constructed.	\$583,189	2
W-3B – Excavation and Revegetation/Restoration of Wetlands and Regrading with Biosolid Compost	YES	YES	TMV virtually eliminated.	Protective equipment required. Noise nuisance from heavy equipment. ----- 6 months	Technology readily available and constructed.	\$502,667	1

Notes: ¹ ARARs - Applicable or Relevant and Appropriate Requirement; ² Goals (prevent human contact and further degradation of groundwater).

EPA's PREFERRED ALTERNATIVE

The EPA preferred alternatives are Source Materials Alternative S-5B and Wetlands Alternative W-3B. Based upon current information, these alternatives appear to provide the best balance among the nine criteria that EPA uses to evaluate alternatives. EPA has determined that the preferred alternatives would be protective of human health and the environment; would attain the Site goals; comply with ARARs; and would be cost effective.

The preferred alternative consists of the following:

- Decontamination/ demolition of pavement and buildings with recycling of metal debris;
- Excavation of contaminated soil, landfilled slag, and contaminated wetlands sediment and appropriate confirmation soil sampling;
- Backfill of excavated soil areas and landfill with clean soil;
- Stabilization or solidification of contaminated soil, stockpiled slag, landfilled slag, and wetlands sediment;
- Off-Site disposal of soils, slag, and sediment at nonhazardous disposal facility;
- Application of a layer of biosolid compost to the entire Ross Metals Site. Grass seeding of the facility and landfill areas; and revegetation of the Site wetlands according to the wetlands revegetation plan developed by EPA, 1998.
- Development of maintenance and monitoring plan to assess the effectiveness of the cleanup action.

The total estimated construction costs associated with both alternatives are \$ 7,736,897. The estimated Operations and Maintenance costs are \$242,969. The estimated total present worth costs are \$ 7,979,866.

THE NEXT STEP: THE COMMUNITY'S ROLE IN THE SELECTION PROCESS

EPA solicits input from the community on the cleanup alternatives proposed for each Superfund site. **EPA has set a public comment period from November 18, 1998 through December 18, 1998, to encourage public participation in the selection process.** The comment period includes a public meeting at which EPA will present the RI/FS Report and Proposed Plan, answer questions, and receive both oral and written comments.

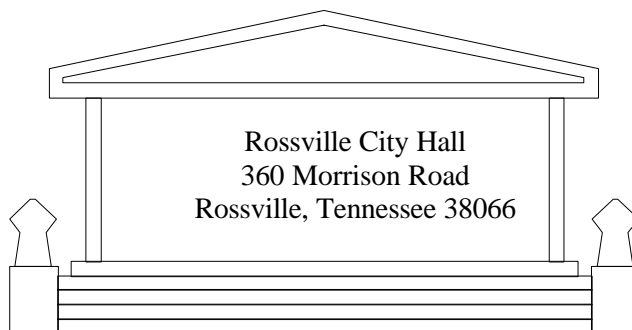
The public meeting is scheduled for 6:30 PM, November 30, 1998, and will be held at Rossville Christian Academy in Rossville.

EPA is required to extend the comment period, for a minimum of 30 days, upon receipt of a timely request to do so. At the end of the public comment period, a summary of all the questions and comments received from the public and EPA's responses will be provided in the Responsiveness Summary. The Responsiveness Summary is included in EPA's Record of Decision (ROD), which is the document that presents EPA's final selection for Site cleanup.

The public can send written comments to or obtain further information from :

Beth Brown
Remedial Project Manager
U.S. EPA Region IV
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-3104
1-800-435-9233 or
404-562-8814

The Proposed Plan and the RI/FS Reports have been placed in the information repository and Administrative Record for the Site. These documents are available for public review and copying at the following location:



GLOSSARY

Administrative Order on Consent: A legal and enforceable agreement signed between EPA and Potentially Responsible Parties (PRPs) whereby PRPs agree to perform or pay the cost of site investigation.

Biosolids: Organic matter (e.g., wood ash, compost, or wastewater treatment plant sludge) that can be used with topsoil for stabilizing slopes, reducing erosion, and providing a nutrient-rich environment for vegetation.

Blast Slag: A by-product or waste that is generated during the lead smelting process.

Comprehensive, Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act. This law created a special tax that goes into a trust fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Under the Superfund program, EPA can either pay for site cleanup when the responsible parties cannot be located or are unwilling or unable to perform the work, or take legal action to force responsible parties to clean up the site or reimburse EPA for the cost of cleanup.

Feasibility Study (FS): A Feasibility Study evaluates different remedial alternatives for site cleanup and recommends the alternative that provides the best balance or protectiveness, effectiveness, implementability, and cost.

Geosynthetic Liner: A man-made textile that significantly reduces rainwater from passing through its tightly woven structure of plastics and clay.

Groundwater: Water beneath the earth's surface that fills spaces among soil, sand, rock, and gravel. Precipitation, such as rain, reaches the ground and then slowly moves through soil, sand, gravel, and rock into small cracks and crevices below the ground surface. During a process that can take many years, groundwater has the potential of becoming a drinking water source.

Institutional Controls: Legal mechanisms to prevent human exposure to contamination remaining on hazardous waste sites.

Leachate: A contaminated liquid resulting when water percolates or trickles through waste materials and collects components of those wastes.

Monitoring: The continued collection of information about the environment that helps gauge the effectiveness of a cleanup action.

National Priorities List (NPL): EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund.

Parts Per Billion (ppb or $\mu\text{g/L}$): A unit of measurement used to describe levels of contamination. For example, one gallon of a liquid in one billion gallons of water is equal to one part per billion.

Parts Per Million (ppm or mg/L): A unit of measurement used to describe levels of contamination. For example, one gallon of a liquid in one million gallons of water is equal to one part per million.

Preferred Alternative: EPA's selected best alternative, based on information collected to date, to address contamination at a site.

Proposed Plan: A fact sheet summarizing EPA's preferred cleanup strategy for a Superfund site, the rationale for the preference, and a review of the alternatives developed in the RI/FS process.

Resource Conservation and Recovery Act (RCRA): A law that established a regulatory system to track hazardous substances from the time of generation to disposal. Provides closure and post-closure minimum requirements for landfills.

Record of Decision (ROD): A public document that explains which cleanup alternative will be used at an NPL site and the reasons for choosing that cleanup alternative over other possibilities.

Remedial Alternatives: A list of the most technologically feasible alternatives for a cleanup strategy.

Remedial Design: An engineering phase that follows the Record of Decision when technical drawings and specifications are developed for the cleanup action at a Superfund Site.

Remedial Investigation (RI): A Remedial Investigation examines the nature and extent of contamination problems at a site.

Responsiveness Summary: A summary of written or oral comments received by EPA during a public comment period.

Superfund: A term commonly used to describe the Federal program established by CERCLA.

Superfund Amendments and Reauthorization Act (SARA): Amendments to CERCLA enacted on October 17, 1986.

Treatability Study: A study to evaluate the effectiveness of a technology in remediating contamination.

COMMENT FORM

The public comment period for the Ross Metals Superfund Site Operable Unit No. 1 is from Wednesday, November 18, to December 18, 1998.

At the end of the comment period, EPA will review and consider all comments before making a final cleanup decision for the Site.

Fold on dashed lines, staple, stamp, and mail

Name
Address
City/State/Zip

Place
Stamp
Here

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Inside: Ross Metals Superfund Site Proposed Plan