SUPERFUND Fact Sheet

TALACHE MINE TAILINGS SITE

Atlanta, Idaho

EPA U.S. ENVIRONMENTAL PROTECTION AGENCY May 2001

EPA Wants Your Comments

The U.S. Environmental Protection Agency (EPA) is seeking comments on alternatives for cleaning up contaminated soil in the "depositional area" of the Talache Mine Tailings site. The depositional area is the 60-acre area at the site where contaminated mine tailings were deposited after one of the historic tailings piles failed in May 1997 (see Site History). This cleanup will be the final cleanup action for the depositional area. Cleanup of the historic tailings piles is currently underway and will be completed this year.

Public Comment Period May 9 to June 8, 2001

EPA is considering five cleanup alternatives, ranging from taking no action, to removing all tailings from the entire depositional area. These alternatives are described in greater detail later in this fact sheet. EPA encourages you to comment on the cleanup alternatives in writing during the public comment period. All comments received during the 30-day comment period will be reviewed and considered before EPA chooses a final cleanup action. We will respond to all significant comments. Comments should be sent by June 8 to:

Dave Tomten, Project Manager
U.S. Environmental Protection Agency
Idaho Operations Office
1435 North Orchard Street
Boise, Idaho 83706

You may also e-mail your comments to tomten.dave@epa.gov

Open House and Informational Meeting to be Held

Atlanta Schoolhouse
May 22, 2001
2:00 - 5:00 p.m.

EPA will hold an open house and meeting to provide information on cleanup of the depositional area at the site and answer your questions about the various alternatives. The open house will begin at 2:00 for you to ask questions individually and review charts and maps. At 3:30, there will be a brief presentation, followed by time for questions and answers. EPA staff will remain after the meeting if anyone wants to discuss further concerns.

Because this is an informational meeting, oral comments given during the meeting will not be recorded in a formal transcript. However, there will be an opportunity to submit written comments at the meeting, and you can send them in to EPA at any time during the 30-day comment period. Written comments must be postmarked no later than June 8, 2001. If you have any questions or would like to provide ideas before the meeting, please call Jeanne O'Dell, Community Involvement Coordinator, toll-free at 1-800-424-4372, extension 6919.

What is the Environmental Problem?

Since the May 1997 tailings release (see Site History), EPA has collected water, soil, and sediment samples throughout the depositional area. The results of these studies were used to complete a human health risk assessment, an evaluation of risks to plants and animals, and a report on cleanup alternatives called an "Engineering Evaluation/Cost Analysis" or "EE/CA." The studies found that:

- High levels of arsenic and other metals are present in some parts of the depositional area. Arsenic, the contaminant of concern, ranges from 9 to 1,780 milligrams/kilogram (mg/kg) across the entire 60-acre depositional area, and averages about 530 mg/kg in the upland portion of depositional area, and 400 mg/kg in the wetland portion of the depositional area.

- Arsenic concentrations in uncontaminated surface soils in the surrounding area average about 36 mg/kg.

- Arsenic in surface soil poses a potential risk to human health for both recreational and residential uses. The risk evaluation also indicated that populations of fish, plants, and animals are **not** being affected by any of the contaminants at the site.

Cleanup Goals are Based on Proposed Land Use

The cleanup at the Talache Mine Tailings Site is based on site-specific "Preliminary Removal Goals." The cleanup goals for arsenic in surface soil are based on the proposed land use for the site. The cleanup goal for recreational use of the depositional area is an average of 360 milligrams/kilogram (mg/kg) arsenic in soil. The cleanup goal for residential use of the depositional area is 36 mg/kg arsenic in soil. Work to meet these cleanup goals would only be done in those areas affected by the 1997 release of tailings from the upper tailings pile. When the cleanup is complete, we will take samples to ensure that the cleanup goals are met.

Alternative 4 is EPA's Preferred Alternative

EPA's preferred cleanup alternative would reduce arsenic in surface soils enough so that the upland part of the depositional area is safe for residential development, and the wetland part of the depositional area is safe for recreational use. EPA is considering this approach because much of the upland area may be developed for residential use. Under EPA's preferred alternative, the cleanup in the depositional area would take place during the 2001 construction season.

However, a cleanup protective of recreational uses in the upland area (Alternative 3) would be acceptable to EPA, if future use of the upland area is limited to recreational use. Enforceable institutional controls, such as easements and restrictive covenants, would be necessary to ensure that homes are not built on the property, unless additional cleanup work is performed to meet the residential goal. These restrictions would be legally binding on future property owners.

EPA is requesting public comments on all alternatives and will consider all comments before selecting a final cleanup alternative. Based on public comment, EPA may modify the preferred alternative or select a combination of the alternatives discussed.

Cleanup Alternatives

EPA developed a range of five alternatives for cleaning up the depositional area. All five alternatives are summarized below and explained in greater detail in the EE/CA. They are:

Alternative 1 - No Action. This alternative is included only as a basis for comparison with the other alternatives. There would be no cost associated with this alternative.

Alternative 2 - Selective Soil Covering for Recreational Use with Institutional Controls Limiting Residential Use.

This alternative consists of: (1) covering contaminated soil with six inches of clean soil, primarily within the 26-acre upland part of the depositional area, as well as in some small areas outside the upland part, to reduce arsenic enough so that the area is safe for recreation, (2) revegetating the cover soil, (3) stabilizing the stream bank in areas affected by earlier cleanup, and (4) using institutional controls to prohibit building homes on the land unless the property owner cleans up the property to meet the residential cleanup standard. The estimated capital and operational costs are $1,089,000.

Alternative 3 - Selective Soil Removal and Backfilling for Recreational Use with Institutional Controls Limiting Residential Use.

This alternative consists of: (1) selective soil removal and limited backfilling with six inches of clean soil, primarily within the upland part of the depositional area, to reduce the arsenic enough so that the area is safe for recreation, and removing soil and backfilling two wetland areas to make them safe for recreation, (2) revegetating the disturbed area, (3) stabilizing the stream bank in areas affected by earlier cleanup, and (4) using institutional controls to prohibit building homes on the land unless the property owner cleans up the property to meet the residential cleanup standard. Estimated capital and operational costs are $789,000.

Alternative 4 - Selective Soil Removal and Backfilling for Residential Use with Institutional Controls.

This alternative consists of: (1) selective soil removal and limited backfilling with twelve inches of clean soil, primarily within the upland part of the depositional area, to reduce arsenic enough so that it is safe for people to build houses in the area, and removing soil and backfilling three adjacent wetland areas with six inches of clean soil to make the area safe for recreation, (2) revegetating the disturbed area, (3) stabilizing the stream bank in areas affected by earlier cleanup, and (4) using institutional controls to protect human health, assuming that homes will be built on the land in the future. Deed notices or zoning restrictions would require property owners to maintain the protective soil layer. If they need to dig on the property, they would be required to safely dispose of any excavated contaminated soil. The estimated capital and operational costs are $2,134,000.

Alternative 5 - Soil Removal and Backfilling to Background Concentrations.

This alternative consists of: (1) removing all tailings from the entire depositional area (both wetlands and uplands), (2) backfilling to restore the original grade and to promote drainage, and (3) revegetating disturbed areas. The estimated capital and operational costs are $9,001,000.

Comparison of Alternatives

Each of the alternatives was evaluated using the following criteria:

- effectiveness at protecting human health and the environment
- ease of implementation
- cost

Alternative 1 would not protect human health. Alternatives 2 through 5 would all protect human health and the environment. Alternatives 2, 3, and 4 all focus on the upland portion of the depositional area, would protect future residents by using institutional controls to control land or resource use, and could be implemented in one construction season. Alternatives 4 and 5 would likely disturb the

ecology of the depositional area more than the other alternatives. Alternative 5 would take two or more construction seasons to implement and would require building a separate repository for contaminated soil. All alternatives would be relatively easy to implement technically and administratively. Costs for the cleanup alternatives range from $789,000 to $9,001,000. More detailed information can be found in the EE/CA.

About Institutional Controls

Institutional controls are designed to ensure that future use of the site is consistent with the cleanup goal, and that clean soil and any other protective barriers placed over contaminants left in place are not disturbed.

Three of the cleanup alternatives proposed for Talache (Alternatives 2, 3, and 4) require institutional controls to continue to protect human health and the environment. These could include restrictive covenants, deed notices, or county or local government zoning ordinance(s).

Under Alternative 4, institutional controls would require a person building a home in the area to safely dispose of any contaminated soils dug from deeper than one foot below the surface, and replace the clean one-foot soil barrier.

Under Alternatives 2 and 3, enforceable institutional controls would ensure that property cleaned up for recreational use is not used for homes. Covenants or easements, which are legally binding on future property owners, are more reliable in the long term than other types of institutional controls, such as zoning restrictions or deed notices.

Site History and Work Completed to Date

The Talache Mine Tailings Site is located near Atlanta, in rural Idaho. On May 15, 1997, one of two historic tailings piles at the site (the Upper Tailings Pile) became overly saturated with water and suffered a "blowout," releasing 16,000 cubic yards of tailings into the valley below. The 60-acre area where the tailings were deposited is known as the "depositional area" and includes both upland and wetland areas. The two tailings piles and the depositional area together make up the site.

The main environmental concerns at the site include the stability of the tailings piles, and the presence of arsenic and other metals in the depositional area. In February 1999, EPA reached agreement with Potentially Responsible Parties (PRPs) to study the site, and to develop and evaluate cleanup alternatives for the tailings piles and the depositional area. In 1999 and 2000, with EPA oversight, the PRPs closely studied the contamination and developed alternatives for stabilizing the tailings piles. The cleanup remedy chosen, after considering all public comments, included stabilizing the piles by buttressing the exterior slopes of the piles, regrading the surface of each pile, placing a soil cover, revegetating, and managing water running on and off the site.

In June 2000, the PRPs agreed to do the work to stabilize the tailings piles. Much of the construction work was completed in 2000. The remaining work, including grading and placing topsoil on the lower pile, revegetating the piles, and constructing water diversions, will be completed in 2001. The PRPs have also agreed to monitor the springs and seeps coming from the base of the tailings piles for a year after construction is complete, and to install water treatment if necessary.

For More Information - Information Repositories

Copies of the EE/CA and other documents about the Talache site are available for your review at the Atlanta Post Office; at EPA's Boise Office at 1435 North Orchard Street, Boise, Idaho; and at the EPA Records Center, 1200 Sixth Avenue, Seattle, Washington.

If you have any questions please contact:

David Tomten, EPA Project Manager at (208) 378-5763
E-mail: tomten.dave@epa.gov

Jeanne O'Dell, Community Involvement Coordinator at (206) 553-6919 or toll free at 1-800-424-4372.
E-mail: odell.jeanne@epa.gov

Check out EPA Region 10's Web Page at:
http://www.epa.gov/r10earth/
To find the Talache web page, click on "Index," then click on "T"

To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting one of the numbers listed above.

United States
Environmental Protection
Agency

Region 10 (ECO-081)
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Seattle WA 98101

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Atlanta, Idaho