KLAU/BUENA VISTA MINES SUPERFUND SITE

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA

San Luis Obispo County, California *August 2006*

Klau/Buena Vista Mines in San Luis Obispo County listed as Superfund site

This is the first in a series of fact sheets from the U.S. Environmental Protection Agency (EPA) which provides information on the Klau/Buena Vista Mines outside Paso Robles, California. The site was added to EPA's National Priorities List (NPL), commonly called the Superfund List, in April 2006. Placing the Klau/Buena Vista Mine on the NPL, allows EPA to use federal resources to conduct cleanup activities at the site.

Included in this fact sheet is a short history of the site, information about future activities and how you can become involved in the Superfund process.

Overview and History of Klau/ Buena Vista Mines

The Klau/Buena Vista Mine is located in San Luis Obispo County, approximately 12 miles west of Paso Robles, California. The Klau/Buena Vista Mine consists of two abandoned mercury mine sites (Klau and Buena Vista) that are located on adjacent properties on a northwest-southeast ridge of the Santa Lucia Range in the California coastal mountains.

Mercury mining and ore processing operations occurred at the Buena Vista Mine and adjacent Klau Mine between 1868 and 1970. Buena Vista Mines, Inc. has owned the Buena Vista Mine at least since 1957 and the Klau Mine since at least 1964.

The most significant contaminant of concern is mercury, a metal that can be harmful to the human nervous system. In 1999, the California Central Coast Regional Water Quality Control Board (RWQCB) requested that the EPA Region 9 Emergency Response Office assist in preventing the continued release of mercury-laden sediments and other contaminants from the site. Substantial site stabilization work was conducted. These actions have reduced the discharge of acid mine drainage (AMD) and discharge into Las Tablas Creek, but uncontained contamination remains on the site. In 2000, EPA removed 120,000 cubic yards of contaminated materials from the drainage channel and secured it in an onsite repository to prevent immediate threats to human health and the environment. In 2002, EPA stabilized a sinkhole on site. In 2002, EPA stabilized a slope failure on site. Finally in 2006, EPA removed the mercury processing building (retort) and some mercury-laden soils. Contaminated materials stored onsite are temporarily capped and will be addressed in the site's long-term cleanup.

What is the problem?

The main concern for this site is the effect of mercury contamination from the mining operations on targets such as fisheries and recreational users of the Las Tablas watershed.

Mercury may exist in mine waste from source areas on the site. Some source areas are seeps from the mine site, which contain AMD. Predominant hazardous substances in the AMD from the site are iron, manganese, aluminum, boron, mercury, nickel, selenium, thallium, and zinc. These metals also pose concern since their concentrations exceed the RWQCB waste discharge requirements. Data indicated that runoff water contains concentrations of mercury and thallium in excess of Maximum Contaminant Levels (MCLs are enforceable regulatory standards under the Safe Drinking Water Act). Other source areas of contamination are mine tailings that remain on the property; the Bureau of Land Management (BLM) Reservoir Dam; tunnels, drifts, stopes, and adits associated with the underground mine workings; and an open pit.

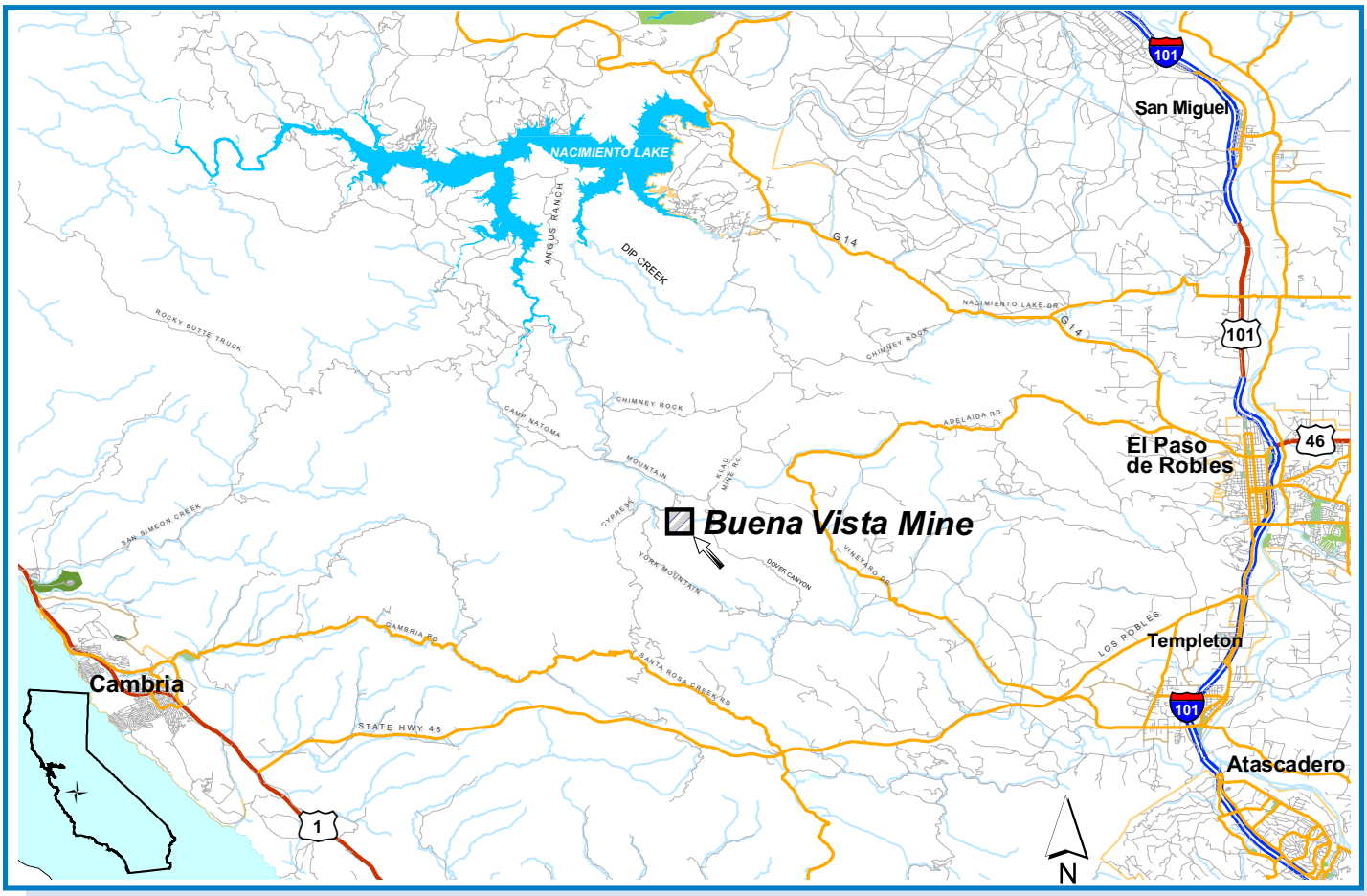


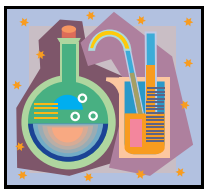
Figure 1: Location of Klau/Buena Vista Mine Superfund Site

What is Mercury?

Mercury is a naturally occurring element found in the earth's crust. Its distribution in the environment is the result of both natural and man-made processes. Humans cannot create or destroy mercury. Pure mercury is a liquid metal, sometimes referred to as quicksilver that volatizes readily. It has traditionally been used to make products like thermometers, switches, and some light bulbs. Mercury contamination at the Klau/Buena Vista Mine is the result of mining mercury and ore processing.

Exposure to mercury. Mercury in the air eventually settles into water or onto land where it can be washed into water. Once deposited, certain microorganisms can change it into methylmercury, a highly toxic form that builds up in fish, shellfish and animals that eat fish. Fish and shellfish are the main sources of methylmercury exposure to humans. Methylmercury builds up more in some types of fish and shellfish than others. The levels of methylmercury in fish and shellfish depend on what they eat, how long they live and how high they are in the food chain.

Health effects of mercury. Mercury exposure at high levels can harm the brain, heart, kidneys, lung, and immune system of people of all ages. Research shows that most people's fish consumption does not cause a health concern. However, it has been demonstrated that high levels of methylmercury in the bloodstream of unborn babies and young children may harm the developing nervous system, making the child less able to think and learn.



Future Activity

EPA plans two important activities in the coming months.

A Remedial Investigation (RI) will be conducted to further assess the nature and extent of mercury in soil and water at the site. This investigation will help EPA determine possible cleanup actions for the site. In the meantime, state and local authorities have numerous health advisories in place warning anglers of eating mercury-contaminated fish.

EPA will also be conducting community interviews as to develop a Community Involvement Plan (CIP). Further community activities will be scheduled as events unfold at the site.

Community Involvement Process

EPA policy and Superfund law establish a strong program of public participation in the site cleanup process. The purpose of the Community Involvement program is to help community members become involved in the decision-making process by developing two-way communication between the affected community and EPA. It focuses on answering the community's questions about the cleanup effort and providing information to the community about site activities.

A Community Involvement Plan (CIP) will be developed to provide information to the affected community and gather community concerns, issues and questions so they may be considered when a cleanup remedy is chosen. The CIP includes interviews and comments from local residents, elected officials and other interested parties.

A number of public meetings and a formal comment period will occur as more site information becomes available. Typically, these events occur when the remedial investigation is released and the choice of the preferred cleanup method is announced. These meetings and comment periods will be announced through fact sheets and through public notices advertised in the Paso Robles Press and the San Luis Obispo Tribune.

EPA Community Involvement Coordinator, Lauren Berkman, is assigned to work with the community on the Klau/Buena Vista Mine site. She is available to answer questions, maintain the mailing list and coordinate community involvement activities, including the Technical Assistant Grant (TAG) program (see box, Page 5). Her contact information can be found below and on the back page.

Information Repositories

Documents, comments and other information concerning the site will be available for public review at an Information Repository. The Information Repository includes general information about Superfund, newspaper notices and the Administrative Record for the site. The Administrative Record is a special file that contains all the information used by EPA to make its decision on the selected remedy. The purpose of making the Administrative Record available to the public is to help community members make informed comments on the selection of the site cleanup method.

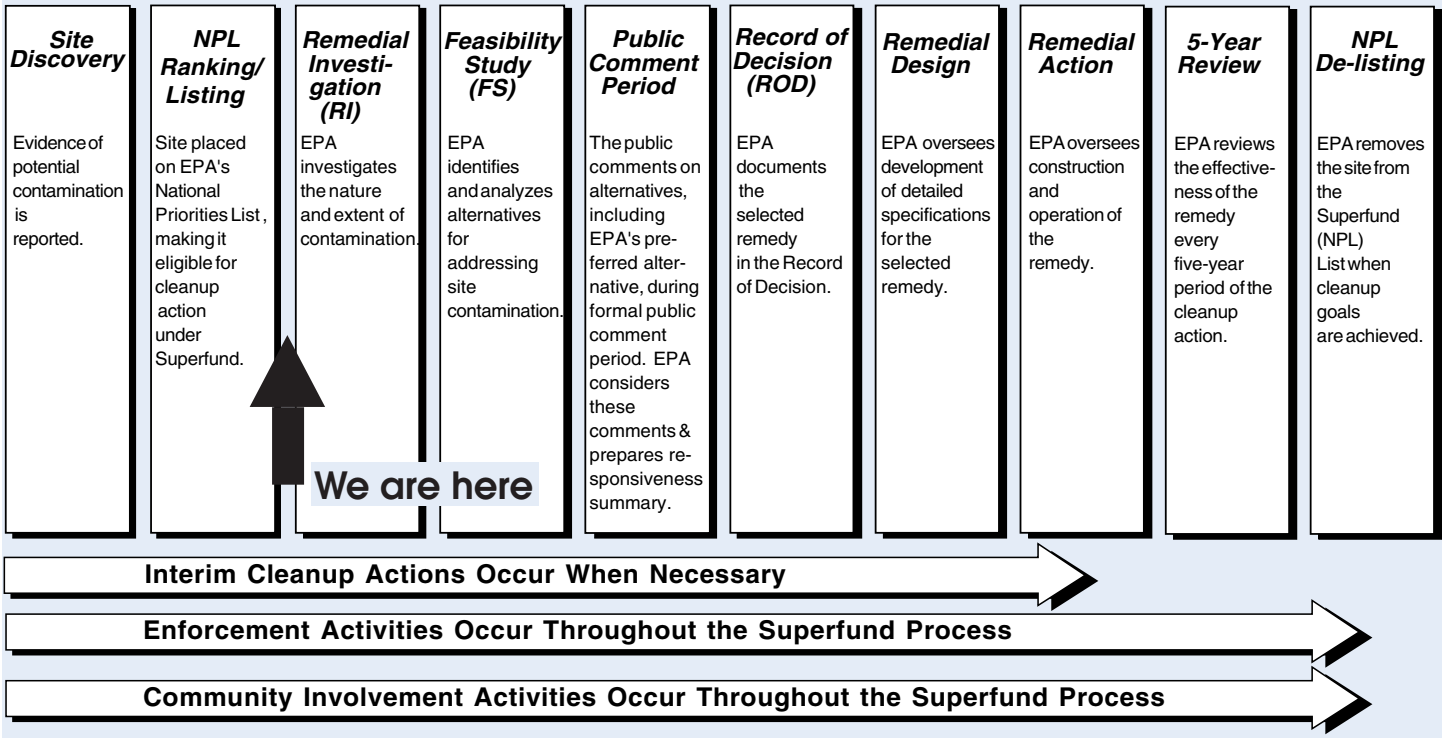
Locations of the Klau/Buena Vista Mine Information Repositories are found on page 5.

If you would like to be interviewed as part of the CIP, please contact Lauren Berkman at **(415) 972-3292**.

Email: berkman.lauren@epa.gov

Toll free number: **1-800-231-3075**

The Superfund Process



What is Superfund?

Superfund is the commonly used name for the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), a federal law enacted in 1980 and amended in 1986. CERCLA enables EPA to respond to hazardous waste sites that threaten public health and the environment. EPA responds to a hazardous waste site by identifying those that are responsible for contaminating it, then requiring them to perform cleanup activities.

If EPA is unsuccessful in identifying responsible parties, EPA may use Superfund resources to perform the cleanup. These funds were largely generated from past taxes on the petroleum and chemical industries. EPA's taxing authority expired in 1995 and has not been renewed by Congress.

Sites that score high enough on the Superfund Hazard Ranking System are listed on the National Priorities List (NPL) of contaminated sites and are eligible for long-term cleanup under Superfund.

The Superfund process has several steps. The process begins with the discovery of the site, then a preliminary assessment or site investigation (PA/SI), then placement on the Superfund list. Next, EPA conducts a remedial investigation (RI) which determines the nature and extent of contamination. This information supports a feasibility study (FS) of available cleanup options. The RI/FS process concludes with an EPA recommendation on a preferred cleanup method, which is publicized during a 30-day public comment period.

Once all comments are considered, EPA chooses a cleanup method and announces a Record of Decision (ROD). These last two steps are to create a detailed cleanup plan, called a Remedial Design (RD), which leads to the clean up of the waste during remedial action (RA) phase.

Technical Assistance Grant Available

The Technical Assistance Grant (TAG) program helps community members affected by the Superfund site activity understand technical issues and data concerning site work, particularly the selection of the final cleanup method. The TAG enables community members to better express their opinions and concerns during the decision-making process. Community groups use TAG funds to hire a technical advisor to review conditions at the site, the nature of the wastes involved and the kinds of technologies available to cleanup the site. Interested groups should contact Lauren Berkman, EPA Community Involvement Coordinator for more information.

The repositories for the Klau/Buena Vista Mine Administrative Record are:

Paso Robles Public Library
1000 Spring Street, Paso Robles, CA 93446
(805) 237-3870

Hours
Mon-Fri 10 am to 8 pm
Sat 10 am to 5 pm
Closed Sunday

EPA Records Center
95 Hawthorn Street, 4th Floor, San Francisco, CA 94105
(415) 536-2000

Hours
Monday-Friday 8 am to 5 pm
Closed Saturdays and Sundays

EPA toll-free number: 1-800-231-3075

(Please leave a message and your call will be returned.)

EPA Website: www.epa.gov/region09/waste/sfund

Mailing List Coupon

If you would like to be included on the mailing list to receive future mailings about the Klau/Buena Vista Mine Superfund Site, please fill out the coupon below and return to:

Lauren Berkman, Community Involvement Coordinator
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105

PLEASE PRINT ALL INFORMATION

NAME: _____

ADDRESS: _____

_____

*PHONE: _____

*FAX: _____

*E-MAIL: _____

*ORGANIZATIONAL AFFILIATION:

_____

*(*Optional items)*

You may also provide the above information by e-mail to: berkman.lauren@epa.gov

Klau/Buena Vista Mine Listed as Superfund Site

If you have any questions or concerns, please contact the EPA staff below who are working on the Klau/Buena Vista mine.

Michele Dineyazhe
Remedial Project Manager
(415) 972-3786
dineyazhe.michele@epa.gov

Lauren Berkman
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Attn: Lauren Berkman (Klau/Buena Vista Mine 8/06)

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