

ENVIRONMENTAL Fact Sheet



Formosa Mine, Douglas County, Oregon

U.S. Environmental Protection Agency, Region 10

March 2007

EPA Proposes Formosa Mine to National Priorities List

The U.S. Environmental Protection Agency (EPA) is proposing to add the Formosa Mine to the Superfund National Priorities List (NPL). The 76-acre site is on Silver Butte in Douglas County, southwest Oregon, about 25 miles south of Roseburg, near the town of Riddle. Past mining at the site for copper, zinc and thorium (used for computer chips) caused releases of heavy metals to the headwaters of Middle Creek and the South Fork of Middle Creek. The site is still releasing contaminants, which have severely degraded 18 miles of stream habitat, including portions of Cow Creek.

Your Comments Are Invited on EPA's Proposed Listing

EPA invites you to comment on the proposal during the **60-day comment period beginning March 7 and ending on May 7, 2007**. After the comment period closes, EPA will consider all comments received. If the site is listed on the National Priorities List, EPA will publish a document in the Federal Register, addressing all significant comments. At that time, EPA will send out another fact sheet with information and next steps.

Site Background

From 1910 through 1937, limited mining took place at the site. After that time, studies documented a thriving fishery and healthy stream habitat in Middle Creek and the South Fork of Middle Creek as late as the 1980s. Formosa Explorations, Inc. reopened the mine in 1990 and worked aggressively until 1993 to produce 350 to 400 tons of ore per day. While closing the mine in 1993 and 1994, Formosa Explorations placed large amounts of crushed ore, tailings and zinc concentrate into the underground mine workings

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Submit your comments, identified by FDMS Docket Number EPA-HQ-SFUND-2007-0079, by one of the following methods:

By postal mail:

Docket Coordinator, Headquarters
U.S. EPA CERCLA Docket Office
(Mail Code 5305T)
1200 Pennsylvania Ave. NW
Washington, DC 20460

By express mail or courier (no facsimiles or tapes):

Docket Coordinator, Headquarters
U.S. EPA CERCLA Docket Office
1301 Constitution Ave.
EPA West, Room 3340
Washington, DC 20004

Such deliveries are only accepted during the Docket's normal hours of operation: 8:30 a.m. to 4:30 p.m. ET, Monday – Friday, excluding federal holidays. Special arrangements should be made for deliveries of boxed information.

To submit your comments electronically, follow the steps at <http://www.regulations.gov> or e-mail: superfund.docket@epa.gov

Site Background *continued*

and sealed the mine openings. The company also removed waste material that had been released during the early 1990s from the headwaters of Middle Creek. This material was collected into a large mound and placed outside the mine.

Since the mine closed, the site has been discharging about five million gallons of acid mine drainage each year. The Oregon Department of Environmental Quality (ODEQ) and the Bureau of Land Management (BLM) have worked together since the mine's closure to assess and deal with these discharges. Activities have included installing a water diversion system and cover material for the mound. Because the site is large and complex, these efforts have not prevented ongoing contaminant discharge to surface water.

In 2006, EPA did a review, called a "Preliminary Assessment," of all the ODEQ and BLM lead-sampling assessment efforts to date. EPA found the site posed sufficient threats to human health and the environment to warrant possible listing on the Superfund National Priorities List.

Why Put the Formosa Mine on the National Priorities List?

Currently, the site emits about five million gallons of acidic drainage per year, containing up to 30,000 pounds of dissolved copper and zinc, along with other metals. The main sources include tailings and other mine wastes placed in the underground mine workings after the mine closed in 1993, and surface tailing piles. Significant concentrations of arsenic, barium, copper, lead, mercury, nickel and zinc have been found in all samples collected at the site.

These discharges have heavily impacted 18 miles of stream, including the entire length of Middle Creek and the South Fork. They have also affected a portion of Cow Creek, where levels of certain contaminants are 10 to 100 times greater than aquatic life standards (levels of contaminants that can safely support aquatic life). This discharge degrades habitat for aquatic life, including macroinvertebrates, resident fish, coastal steelhead trout and Oregon coastal coho salmon.

In addition to ecological risks, the site poses a health risk to people eating the fish. Cow Creek is currently fished by the Cow Creek Band of Umpqua Tribe of Indians and by recreational fishermen.

For More Information

Materials supporting EPA's proposed NPL listing are available for review at these locations:

EPA Region 10 Records Center
1200 Sixth Avenue, 7th Floor, Seattle, WA 98101
Hours: M-F, 8:30 a.m. — 4:30 p.m.
Please call 206-553-4494 for an appointment.

Roseburg Library
1409 N.E. Diamond Lake Boulevard
Roseburg, OR 97470
541-957-4635

Canyonville Library
250 N. Main
Canyonville, OR 97417
541-839-4727

Online, visit: <http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/formosa>

If you have questions, contact one of the following people:

NPL Listing or technical information:

Ken Marcy
Region 10 NPL Coordinator
206-553-2782
marcy.ken@epa.gov

General information:

Debra Sherbina
Community Involvement Coordinator
206-553-0247
sherbina.debra@epa.gov



If you need materials in an alternative format, please call Debra Sherbina. TTY users, please call the Federal Relay Service: 800-877-8339.