

## Funding Proposals for Formosa Mine Site Cleanup

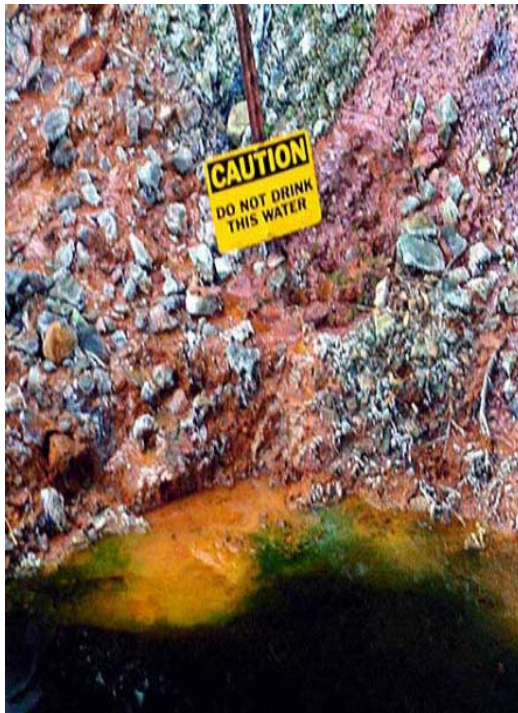
### Introduction

This fact sheet presents information about the Formosa Mine Site project, including recent initiatives by the Oregon Department of Environmental Quality (DEQ) and the U.S. Bureau of Land Management (BLM) to find new finding opportunities for completing the cleanup.

The Formosa Mine Site, a former copper and zinc mine, is located near Riddle in Douglas County. The mine operated most recently between 1990 and 1993 under the ownership of a Canadian mining company, Formosa Exploration Inc. In 1993, when active mining operations ended, the company and Oregon Department of Geology and Mineral Industries began mine reclamation work. By 1997, the system installed to handle mine drainage was no longer functioning, resulting in acid mine drainage to the headwaters of Middle Creek.

### Environmental impact

The Formosa Mine straddles the divide between Middle Creek and the South Fork of Middle Creek, both of which are prime habitat for steelhead and coho salmon. These watersheds are within the Cow Creek drainage of the South Umpqua River.



Both streams have been seriously polluted by the former mining operations. Concentrations of copper, cadmium, lead and zinc are now present in a total of 18 miles of Middle and South Fork at levels that are toxic to salmon, steelhead and aquatic insect populations. Contaminated groundwater leaching from the mine workings is the primary source of pollution.

### Who is responsible?

Formosa Exploration, Inc. abandoned the site in 1994. The prospects for recovering cleanup costs from the company or its principals are not good.

The mine workings are located on both private land owned by the mining company and federal land managed by the BLM.

Since 1997, DEQ and BLM together have spent about \$1.5 million on site investigation and cleanup activities. BLM funded work prior to 2000. Since then, DEQ has conducted most of the investigation and cleanup activities, with technical support from BLM.

DEQ is using limited funds available in the State of Oregon's Orphan Site Account to pay for site investigation and interim cleanup activities. The Orphan Site Account is reserved for high environmental priority sites when the party who is responsible for cleanup is unknown, unable to pay or unwilling to perform the work. In this case, the former owner of the mine is an insolvent Canadian company.

### Project status

DEQ and BLM are completing an evaluation of alternatives for cleaning up the mine. The resulting "feasibility study" will be available for public review in May and will identify a recommended final cleanup alternative for restoring the watersheds.

DEQ and BLM will host a public workshop in June to discuss the findings of this report and to get public comments.

### Next step: developing funding sources

A final cleanup of the site, such as the currently preferred 'partial excavation alternative', is expected to cost \$10-15 million dollars. DEQ and BLM have submitted a 'Title II' grant proposal for funding the next phase of the



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Formosa mine cleanup project. A successful Title II grant award of \$300,000 will help pay for engineering work needed to implement the cleanup. Information about the 'Title II' grants program is available at:

[http://www.or.blm.gov/roseburg/Payments to Counties/old\\_index.htm](http://www.or.blm.gov/roseburg/Payments_to_Counties/old_index.htm).

Money available from the state's Orphan Site Account and a successful Title II grant award will provide the funding necessary to keep the project going, but these funds will not be able to pay all the costs associated with implementing a final remedy.

To restore the mine site watershed, federal funds will be necessary. We are currently evaluating potential use of the 'Oregon Solutions' process for development of a comprehensive, community-based strategy for obtaining federal and other matching funds to pay for the final cleanup.

The Oregon Solutions mission is to develop sustainable solutions through the collaborative efforts of businesses, government and non-profit organizations. This approach relies upon a proven strategy for developing solutions to support economic, environmental and community objectives. Additional Oregon Solutions information is available at: <http://www.ORSolutions.org>

### **Additional information**

If you have suggestions or questions about funding for the Formosa cleanup, please contact:

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For information about the remedial investigation, risk assessment, feasibility study and other Formosa project activities, please contact the DEQ and BLM project managers:

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DEQ maintains a comprehensive updated internet web site for the Formosa mine project, including copies of reports, fact sheets, and an updated project schedule, at

<http://www.deq.state.or.us/wr/LocalProjects/FormosaMine/formosa.htm>

### **Alternative formats**

Alternative formats (Braille, large type, etc.) of this document can be made available. Contact DEQ's Office of Communications & Outreach, Portland, for more information at (503) 229-5696, or call toll-free in Oregon at 1-800-452-4011, x5696.