



Hardscrabble Mine *Engineering Evaluation/Cost Analysis Fact Sheet*

Altaville Mining District, Hardscrabble Mine, Six Rivers National Forest

Introduction

This fact sheet is being distributed to announce the proposed environmental cleanup of mine waste at the former Hardscrabble Mine. The U.S. Department of Agriculture Forest Service (Forest Service) has prepared an Engineering Evaluation/Cost Analysis (EE/CA) that is available for public review.

The EE/CA evaluates potential removal action alternatives for Hardscrabble Mine based on their effectiveness, implementability, and cost.

The purpose of this fact sheet is to announce the EE/CA, provide background information on the mine and information included in the EE/CA, and present the schedule for public participation in the EE/CA.

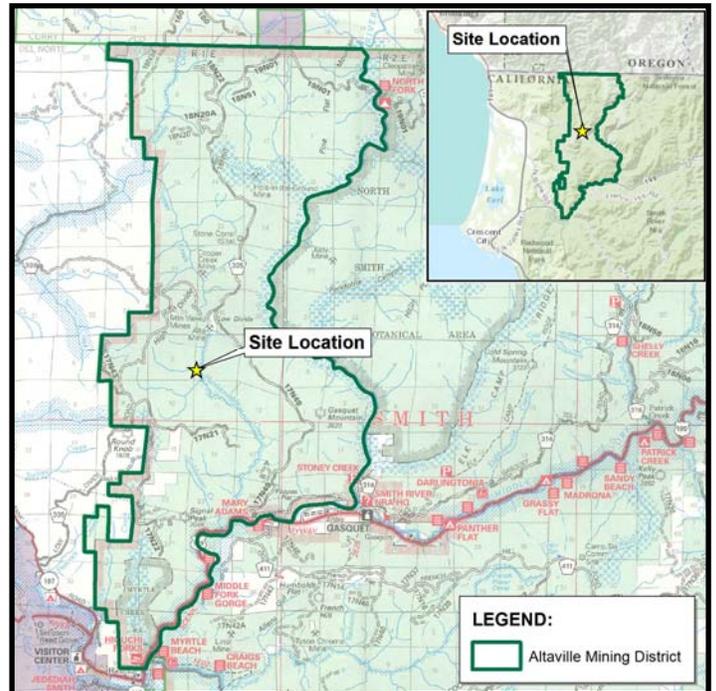
Background and Site Description

The Hardscrabble Mine is an inactive copper mine within the Altaville Mining District. The mine is located in the southeast quarter of Section 3, Township 17 North, Range 1 East, of the Humboldt Baseline and Meridian, within the Six Rivers National Forest, approximately 20 miles northeast of Crescent City in Del Norte County, California. Environmental investigations conducted at the mine from 2007 to 2013 indicate that waste rock is a source of metals contamination.

Streamlined Risk Assessment

The EE/CA evaluated risk to humans and wildlife that may be present at the Hardscrabble Mine. Results indicated that humans who come in contact with waste rock at the mine may be exposed to arsenic, cobalt, and copper at concentrations that pose an unacceptable risk to human health.

A number of protected species may exist at the mine or are known to exist downstream of the mine. The mine is located on the banks of a creek, which may provide habitat to anadromous fish and is a tributary to a creek with an known population of anadromous fish. Based on the risk assessment results, cobalt, copper, and



Site Location and Vicinity



Hardscrabble Mine

silver concentrations in waste rock and tailings may pose an unacceptable risk to sensitive ecological receptors at Hardscrabble Mine.

Because direct exposure to metals found at the mine poses an unacceptable risk to human and ecological receptors, removal action objectives and goals were established for the mine.

Removal Action Objective and Goals

The preliminary removal action objectives are to (1) reduce exposure of humans and wildlife to metals in waste rock to acceptable levels and (2) reduce the release of metals eroding from waste rock into surface waterways. The preliminary removal goal for the site is to remove the three waste rock piles with elevated metals concentrations. The EE/CA provides further information about the removal action goals proposed for Hardscrabble Mine.

Information Included in the EE/CA

The EE/CA evaluated removal action alternatives to clean up contamination at Hardscrabble Mine, including no action, onsite encapsulation, and offsite disposal. The EE/CA evaluates each alternative for its effectiveness, implementability, and cost and recommends the most appropriate alternative for the mine.

Recommended Removal Action

The removal action alternative recommended for Hardscrabble Mine is **Removal and Onsite Encapsulation**. This alternative will meet the removal action objectives and goals for the mine. This alternative is recommended because it is effective, implementable, and has the lowest long-term cost.

How Can I Participate?

The Forest Service invites you to comment on the proposed removal action. The EE/CA is available online, and the public comment period is from May 1, 2014, to May 31, 2014. Here are ways to get involved:

- Review the EE/CA, online at <http://www.fs.usda.gov/srnf>
- Submit written comments to the project contact



Project Contact

If you have any questions or concerns about the planned removal activities at the site, please contact:

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