

Red Devil Mine

Environmental Investigation Update

January 2015

This newsletter provides updates on the environmental project at the Red Devil Mine, an abandoned cinnabar mine and mercury production facility on the Kuskokwim River. A complete record of documents for this investigation, including previous newsletters, is available at www.blm.gov/ak/red_devil_mine.

Since late 2009, BLM has investigated the Red Devil Mine site to better understand contaminants left by past mining activity and how those contaminants interact with the local soil, water, and sediment to create potential risk to humans and the environment. The investigation uses a process defined under the Comprehensive Environmental Response, Compensation, and Liability Act, known as CERCLA.

Preventing Tailings Erosion (Early Action)



The Remedial Investigation at the Red Devil Mine site showed that tailings piles were eroding into Red Devil Creek, carrying with them high concentrations of mercury, arsenic, and antimony. BLM completed an early action at the Red Devil Mine site this past field season to prevent the mine tailings from further eroding into Red Devil Creek and migrating into the Kuskokwim River.

The action included realigning a portion of Red Devil Creek, moving the largest tailings pile away from the creek, and constructing a retention basin in the creek downstream of the tailings pile to catch future eroded tailings. This action stabilized the movement of tailings until site-wide action can be performed.

BLM coordinated the early action with the U.S. Environmental Protection Agency (EPA), Alaska Department of Environmental Conservation (ADEC), and three other state agencies. We also consulted with interested tribes and Alaska Native corporations.



PHOTO AT TOP: Red Devil Mine ore processing facility, 1943

CENTER: Regraded tailings pile and realigned section of Red Devil Creek

LOWER LEFT: Regraded tailings pile. Tailings moved away from Red Devil Creek are covered in background.

LOWER RIGHT: Settling pond downstream of tailings pile

BLM

Anchorage Field Office



Additional Data Collection in 2015

During review of the draft Feasibility Study in 2014, BLM, EPA and ADEC determined the need for additional data collection at the Red Devil Mine site. The data are needed to better understand the influence of natural ore on groundwater concentrations, provide a more accurate estimate of the volume of tailings to be remediated, and to better understand the potential impacts of tailings in the Kuskokwim River.

Data collection in 2015 will include:

- **Water quality monitoring** in Red Devil Creek (spring and fall 2015)
- **Groundwater monitoring:** BLM will install new wells in the surface mine area and replace wells near Red Devil Creek that were removed as part of the early action. The new wells will provide information to better understand the influence of natural ore on groundwater concentrations. We will also collect samples from existing wells.
- **Soil sampling:** BLM will sample soil in the surface mine area and near Red Devil Creek. Samples from the surface mine area will help us better understand how natural ore affects soil concentrations. Soil samples collected near Red Devil Creek will allow BLM to more accurately estimate the volume of tailings and soil to be remediated.
- **Kuskokwim River sediment:** BLM will collect additional data to help us define the best approach to remedial action in the river.

The results of the additional data collection will be documented in a supplement to the Remedial Investigation report. The results will also inform a supplement to the Feasibility Study, which defines alternatives for site-wide remedial action. The initial Feasibility Study focused on tailings and related contaminated soil. The supplement will focus on groundwater and Kuskokwim River sediment.

When the Remedial Investigation/Feasibility Study is complete, BLM will summarize the document in a non-technical format called the Proposed Plan. This plan will also describe BLM's preferred site-wide remediation alternative. BLM will present the Proposed Plan to interested communities for public comment and ask for feedback on the preferred alternative. We anticipate the Proposed Plan will be ready to present to communities in the fall of 2015 or the following spring.

After we receive and consider public comment, we will develop a Record of Decision to define what action(s) will be taken, applicable cleanup levels, and future monitoring requirements.



Chuathbaluk community meeting, March 2014

How to Stay Informed

If you received this newsletter by regular mail, we will notify you when the Proposed Plan is available for public comment. As in the past, we will contact communities to offer meetings to explain the plan and invite your comments. You may read the plan online and submit comments via the website if you cannot attend a public meeting.

Your comments and suggestions were helpful to BLM during earlier cleanup actions at the site. We invite your continued participation as we move toward a long-term remediation plan for the Red Devil Mine site.



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