Red Devil Mine

Environmental Investigation Update

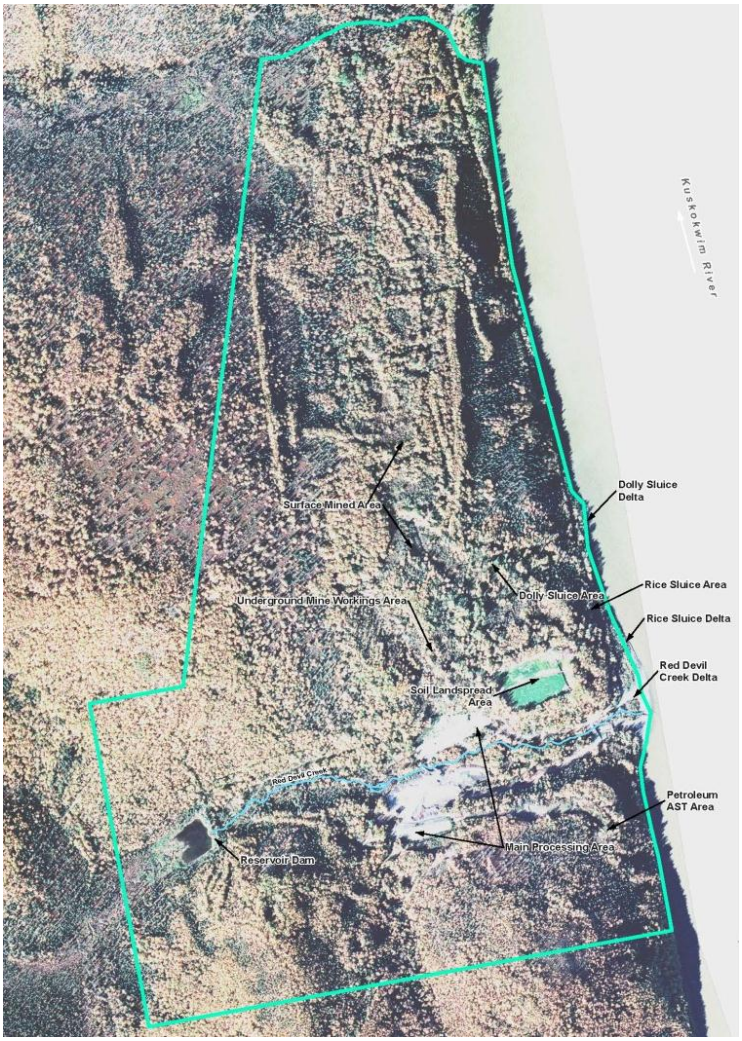
May 2013

Red Devil Mine ore processing facility, 1943

BLM

This newsletter provides updates on the environmental investigation 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.

The BLM continues work on a **Remedial Investigation and Feasibility Study** for the Red Devil Mine site. The purpose is to better understand the physical setting, analyze potential risks to human health and the environment, and determine what can be done to address those risks. The investigation uses a process defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).



Project Survey

Since our last project newsletter (August 2012), the BLM surveyed an area that includes all areas previously disturbed during mine operations, plus a buffer zone for human health and safety. The lands within this area total 191 acres.

For your safety, the BLM asks that you avoid using or traveling on these lands while we develop a plan to address the mine tailings.

Proposed Plan

Since our 2012 community meetings, the BLM has evaluated several response actions (remedial actions) to reduce the risk created by the tailings. The results are being compiled in a Feasibility Study report.

When the report is complete, the BLM will prepare a Proposed Plan to summarize the results and explain the proposed remedy. The BLM will seek community and tribal input on the Proposed Plan, and consider this input as we develop the Final Plan.

Early Action

CERCLA provides for early remedial action, or near-term response, in those situations where action is needed before the overall site response is defined. The BLM is analyzing several ways to prevent tailings from migrating down Red Devil Creek and into the Kuskokwim River. We anticipate taking an early action to meet this objective prior to conducting site-wide remedial actions.

Before conducting any early response action, the BLM would inform and engage communities and tribes.

Anchorage Field Office

Fish Telemetry Study

The BLM continues to collect and interpret telemetry data to provide a better picture of burbot (lush), pike and grayling seasonal movements.

Data indicate that adult pike within major tributaries such as the Holitna, George, and Takotna spend most of the year in those rivers and rarely enter the Kuskokwim. Pike from these tributaries had the highest concentrations of mercury compared to pike from the Kuskokwim and other tributaries. Both naturally occurring mineral deposits and historical mines likely contribute to the elevated mercury found in large pike within these tributaries.

Many of the burbot sampled as part of this study contained elevated concentrations of mercury. However, burbot move large distances (hundreds of river miles) during late fall and spring, so identifying specific sources is difficult. In general, burbot sampled in the middle Kuskokwim during the summer had much higher concentrations than those sampled in the winter. Fish movement data indicate that burbot sampled during the winter had likely moved up from the lower river, which is further away from potential mercury sources along the middle Kuskokwim.

The latest fish tissue report is available at **www.blm.gov/ak/st/en/prog/fisheries/rdm_fish.html.** We expect to update the fish tissue report later this year as new data on fish movement are collected. A final report is projected for 2015. No additional tissue sampling is planned for 2013.

Site Monitoring

This summer the BLM will visit the Red Devil Mine site to monitor the progress of two remediation actions conducted in earlier field seasons. In late May, we'll visit the site to sample contaminated soil removed from a former explosives bunker (powderhouse) discovered in 2010. The soil is being treated on site for explosives residues. The BLM will collect samples from the treatment cell to measure progress of contaminant reduction and add a soil amendment to further break down the residue.

In September the BLM will return to the site to conduct annual sampling of the five landspread remediation cells where petroleum contaminated soil is being treated. Petroleum hydrocarbon levels in the landspread cells have decreased significantly since the landspread was established in 2010. This year's sampling will likely demonstrate that cleanup is complete for at least one of the cells.

Next Steps

Under the current project schedule, the BLM would work with tribes and communities to schedule meetings and consultations later this year when the Proposed Plan is completed. We'll also engage communities prior to conducting any early response action.

The BLM remains committed to working with all interested tribes and communities as we move through the CERCLA process for the Red Devil Mine site. If you have questions or concerns about the project, please use the contact information at the bottom of this newsletter. Let's talk!

Safety Reminder

As breakup approaches, please continue to observe the safety gate and signage at the site. Specifically, we ask that you avoid the area inside the project boundary. We also ask that you help us by sharing this safety message with other residents and communities while we develop response alternatives for the site.

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