

Red Devil Mine Community Relations Plan

Bureau of Land Management
Anchorage Field Office
March 8, 1999

A. OVERVIEW OF COMMUNITY RELATIONS PLAN

This Community Relations Plan identifies issues of community concern regarding the Red Devil Mine cleanup project near Red Devil, Alaska. This plan outlines community relations activities to be conducted during the site investigation process and associated removal actions.

The plan's goal is to keep local residents and officials informed throughout the cleanup process, and assure local residents that BLM is managing the cleanup in a safe and responsible manner. This plan follows guidance on community relation requirements outlined in the U.S. Environmental Protection Agency's (EPA) Community Relations in Superfund: A Handbook.

B. CAPSULE SITE DESCRIPTION

The Red Devil Mine is located approximately 250 miles west of Anchorage, Alaska, 8 miles northwest of Sleetmute, and 2 miles southeast of the community of Red Devil. The mine is on the south side of the Kuskokwim River at T. 19 N., R. 44 W., Southeast quarter of Section 6, Seward Meridian.

The Red Devil mercury mine was operated sporadically from 1933 until 1971. During its operational life approximately 35,000 flasks of mercury were produced. The site consists of a surface mining area, a collapsed adit, a vertical shaft, three tailing piles, three settling ponds, five large fuel tanks, drum storage areas, the remains of approximately 18 buildings used for housing, laboratory, mill, steam plant, and chemical storage sheds.

Site Investigations have been completed by the Alaska Department of Environmental Conservation (ADEC), U.S. Environmental Protection Agency (EPA), and BLM during the late 1980's and early 1990's. BLM agreed with ADEC and EPA in 1989 to remove or neutralize site chemicals and electrical transformers, to annually monitor surface water, post site warnings, and restrict site access. BLM has posted warnings, removed transformer oil, and made effort to restrict access. Annual water monitoring has not been done consistently.

In 1998, BLM tasked its contractor to develop a work plan to remove hazardous materials from the site. These materials include: copper sulfate, sodium hydroxide, potassium carbonate, 55-gallon drums (contents include diesel and water, cutting oil, aero xanthate, grease), transformer oil, and lead-acid batteries. Limited quantities of mercury contaminated sediment and petroleum stained soil will also be removed. Site soils, water, and sediment will be sampled and analyzed according to EPA and Alaska Department of Environmental Conservation (ADEC) guidance.

The final remedial action will address mercury, antimony, and arsenic leaching from tailings piles and settling ponds. These metals are naturally occurring in the area geology. The excavated and crushed rocks that make up the settling ponds and tailings piles leach metals. The metals dissolve out of the rocks due to their exposure to water and oxygen.

A field visit was completed on June 23, 1998 by a BLM representative and contractors. The removal of hazardous materials and sampling is scheduled to be completed during the 1999 field season.

Research has been conducted to identify Potential Responsible Parties (PRPs) to give them the opportunity to assist with the cleanup. Former mine operators are financially liable for the cleanup costs. No PRPs associated with the mine operation have accepted responsibility to date.

C. COMMUNITY BACKGROUND

1) Community Profile

This community profile was modified from the Alaska Department of Community and Regional Affairs Community Database detailed query; Internet address: http://www.comregaf.state.ak.us/CF_ComDB.htm

Red Devil Community Overview

Current Population: 39
Incorporation Type: Unincorporated
Borough Located In: Unorganized
School District: Kuspuk Schools
Regional Native Corporation: Calista Corporation
Located at: 157° 18' W Longitude - 61° 45' N Latitude
Land Area: 23.5 Square Miles
Water Area: 1.9 Square Miles

Unlike other villages in the area, Red Devil is a mixed population of Eskimos, Athabascans and non-Natives. Subsistence activities are prevalent. The sale of alcohol is prohibited, although importation or possession are allowed.

Economy

Since the closure of the mercury mine in 1971, employment opportunities have been limited. Income is supplemented by subsistence activities, BLM firefighting, or work in the commercial fishing industry. Salmon, bear, moose, caribou, rabbit, waterfowl and berries are harvested in season.

Facilities

Water is derived from individual wells or hauled from the school well. Some wells have a high iron content. Almost 40% of the households are fully plumbed. Sewage is disposed of on an individual basis. The school and teacher's housing use individual septic tanks and drain fields; others use pit privies.

The old, unpermitted landfill on DOT land was recently closed, and a new site is needed. A feasibility study of alternative water, sewer and waste operations has been funded. The community needs a small watering point and washeteria.

Transportation

The Kuskokwim River serves as a major transportation link and supply route for bulk supplies and fuel oil during the summer. In the winter the frozen river is used by snow machines for travel to neighboring villages. A 4,750' gravel airstrip provides year-round access. It is owned and operated by the State. Scheduled weekday service is available. Local interests want a 9-mile road from Red Devil to Sleetmute constructed.

Climate

The climate in Red Devil is continental with temperatures ranging between -58° and 90°. Annual snowfall averages 85 inches, with total precipitation of 20 inches. High winds often cause flight delays in fall and winter. The Kuskokwim River is ice-free from mid-June through October.

Local Water & Sewer

Water, Percent of Households Using:

Public Water System: 0.0%
Individual Well: 38.1%
Other: 61.9% (River, Cistern, etc.)

Sewer, Percent of Households Using:

Public Sewer System: 0.0%
Septic Tank/Cesspool: 38.1%
Other Disposal: 61.9%

For additional community information see source document listed above.

2) Chronology of Community Involvement

MAJOR ACTIONS TO DATE:

1987-1997

BLM personnel and its contractors contacted local individuals, native corporations, ADEC, and EPA during previous site investigations, removal actions, and during PRP research.

1998

BLM personnel communicated intentions and current activities with several local residents, representatives of the Kuskokwim and Calista native corporations, ADEC, and EPA.

Information and interviews were given to the Tundra Drum newspaper and the Alaska Inter-Tribal Council (AITC) at their request. Articles appeared in the Tundra Drum, Anchorage Daily News and were disseminated by The Associated Press. An article was also published in an AITC newsletter.

3) Key Community Concerns

Community concerns were received during conversations with Red Devil community members and through written and oral communications with native corporation representatives.

Concerns and Responses:

1) AITC voiced concerns to the public and EPA that the Red Devil Mine was poisoning the water and fish of the Kuskokwim River, and thus the people in the Kuskokwim watershed.

The upper Kuskokwim River region has historically been identified as an area that is geologically rich in metallic ores, and as such has been mined for its resources. The U.S. Geological Survey (USGS) has completed extensive studies of this area to characterize the extent to which the natural and man-altered environment are currently impacted by these metals. Their independent studies have examined soils, water, sediment, vegetation, and fish in this region. They have summarily found that the existence of the Red Devil Mine in its current state is not a hazard to people along the Kuskokwim River. Water samples taken from the Kuskokwim River above and below the mine had total mercury levels approximately a magnitude below EPA and ADEC drinking water standards. Samples of fish tissue above and below the mine had total mercury levels approximately a magnitude below the limits set by the Food and Drug Administration. Nearly all tributaries sampled by the USGS, above and below the mine, showed

detectible levels of total mercury in the water and in fish tissue. For example, fish in a downstream tributary of the Kuskokwim River (Kolomakof River) had levels of mercury as high and higher than those near mine areas, yet no mines were along this river. This was attributed to a possible undiscovered mercury lode. Furthermore, the USGS found that the mercury in the soils at the Red Devil Mine is primarily in a stable form and is not bioaccessible. The more toxic form, methyl mercury, is a minor constituent of the total mercury suite. Finally, the USGS states the "...Red Devil Mine is probably not hazardous to humans and wildlife in the region." In summary, the BLM is being proactive to remove on-site chemicals before they have a chance to migrate off-site.

References:

- Baily, E.A., and Gray, J.E., 1997, Mercury in the terrestrial environment, Kuskokwim Mountains region, southwestern Alaska: U.S. Geological Survey Professional Paper 1574, pp. 41-56.
- Bailey, E.A., Hines, M.E., and Gray, J.E., 1997, Mercury speciation in soils and vegetation, Southwest Alaska, in Wanty, R.B., Marsh, S.P., and Gough, L.P., eds., 4th International Symposium on Environmental Geochemistry Proceedings: U.S. Geological Survey Open-file Report, OF-97-496, 100 p.
- Gray, J.E., Meier, A.L., O'Leary, R.M., Outwater, Carol, and Theodorakos, P.M., 1996, Environmental geochemistry of mercury deposits in southwestern Alaska: mercury contents in fish, stream sediment, and stream water samples: U.S. Geological Survey Bulletin 2152, pp. 17-29.
- Gray, J.E., Theodorakos, P.M., Budahn, Jim, O'Leary, R.M., 1994, Mercury in the environment and its implications, Kuskokwim River region, southwestern Alaska: U.S. Geological Survey Bulletin 2107, pp. 3-13.

2) A local resident was concerned about the physical and chemical hazards for site visitors.

BLM shares these concerns and warns people to not visit the site. The site has been posted with warning signs and a chain was placed across the roadway to restrict access. The chain and probably some of the signs have been removed by unknown parties. Hazards include collapsed mine adits and buildings, open vertical shafts, stockpiled processing chemicals, residual mercury, petroleum products, and probably asbestos.

ATTACHMENT 1

List of Contacts and Interested Parties

Bureau of Land Management, Anchorage Field Office

Mike Alcorn, Environmental Protection Specialist
6881 Abbott Loop Road
Anchorage, Alaska 99507
(907)267-1442, fax (907)267-1304

U.S. Environmental Protection Agency

Matt Carr, On Scene Coordinator
US EPA, Anchorage Office
222 W. 7th Ave, #19
Anchorage, AK 99513
271-3616, fax: 271-3424

Mark Ader, Federal Facilities Coordinator
Mail Stop ECL 115, US EPA Region X, 1200 6th Ave,
Seattle, WA 98101
(206)553-1808, fax (206)553-0124

Nick Ceto, Regional Mining Coordinator
Mail Stop ECL 116, US EPA Region X, 1200 6th Ave,
Seattle, WA 98101
(206)553-1816, fax (206)553-0124

Alaska Department of Environmental Conservation

Eileen Olson
ADEC, Contaminated Sites Program
555 Cordova St., 2nd floor
Anchorage, AK 995501
(907)269-7527, fax: 7649, 7687

Municipal Officials

Red Devil is not incorporated as a municipality. Consequently,
there is no "municipal official" information for this community.

Local Contacts

Gail Vanderpool
P.O. Box 61
Red Devil, AK 99656
Phone: 907-447-3225
Fax: 907-447-3226

Native Corporations

Mike Harper
Kuskokwim Corp.
601 W. 5th St., Suite 420
Anchorage 99501
267-2101, ext 102

June Macaty
Calista Corp.
601 W. 5th Ave, Suite 200
Anchorage 99501
279-5516 fax: 272-5060

Debra Vo, Executive Director
Alaska Inter-Tribal Council
431 W. 7th Avenue, Suite 201
Anchorage, AK 99501
907-563-9334

ATTACHMENT 2

Locations for Administrative Records and Meetings

The Administrative Record is planned to be made available at:

- 1) Red Devil School, Red Devil, Alaska
- 2) BLM Anchorage Field Office Public Room
6881 Abbott Loop Road
Anchorage, Alaska 99507

Public meetings will likely be held at the Red Devil School.
Announcements will be made prior to any meetings.