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**Rocky Ridge Mine  
Pre-CERCLIS Screening Trip Report  
Whatcom County, Washington  
TDD: 03-01-0002**

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Contract: 68-S0-01-01  
September 2004

Region 10

***START-2***

Superfund Technical Assessment and Response Team

Submitted To: Joanne LaBaw, Task Monitor  
United States Environmental Protection Agency  
1200 Sixth Avenue  
Seattle, Washington 98101

**TRIP REPORT**

DATE: September 16, 2004  
TO: Joanne LaBaw, Task Monitor, EPA, Mail Stop ECL-115  
FROM: Mark Longtine, Project Manager, E & E, Seattle, WA  
SUBJ: Rocky Ridge Mine Pre-CERCLIS Screening  
REF: Contract No. 68-S0-01-01, Technical Direction Document No. 03-01-0002

Place Visited:

Site Name: Rocky Ridge Coal Mine  
CERCLIS ID No.: Not applicable  
Location: Whatcom County, Washington  
Latitude: Not known  
Longitude: Not known  
Legal Description: Southwest ¼, Section 31, Township 38 North, Range 4 East, Willamette Meridian  
Congressional District: Washington  
Site Owner: Not known  
Site Contact: Not known

Purpose of Trip:

Site reconnaissance visit for pre-Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) screening.

Persons Responding:

Mark Longtine, Ecology and Environment, Inc., Seattle, Washington.  
Joanne LaBaw, United States Environmental Protection Agency (EPA), Seattle, Washington  
Deborah Neal, EPA, Seattle, Washington

Site Owners:

The location of the site was not determined; therefore, site owners were not identified.

Date of Trip:

May 15, 2003

**BACKGROUND**

A pre-CERCLIS screening was performed at the Rocky Ridge Mine, located in Whatcom County, Washington. The EPA is conducting preliminary assessments (PAs) and pre-CERCLIS screenings at several abandoned coal mines in the Bellingham/Lake Whatcom area, Washington. The purpose of the PAs and pre-CERCLIS screenings is to determine whether the mines pose a threat to public health or the environment, and to determine whether environmental cleanup is needed. The EPA is conducting the PAs and pre-CERCLIS screenings in response to a citizens' petition filed by two environmental groups in Bellingham, the Environmental Exposure Network and the Clean Water Alliance. These groups contend the mines may contain pollutants, such as mercury and heavy metals.

**SITE DESCRIPTION/OWNERSHIP HISTORY**

The Rocky Ridge Coal Mine is reported to have been opened in 1898 by Harry Moore (Vonheeder 1975). It appears that the mine existed since at least 1891 based upon the posting of the "Rocky Ridge Coal Mine" on the *Map of Whatcom County, Washington* prepared in that year by Edmund S. Hincks (Hincks 1891). The mine is also located on the *Map of Whatcom County* prepared by Campbell circa 1904 (Campbell 1904), suggesting that operations may have continued until at least 1904. An article on the Rocky Ridge Mine published in *The Weekly Blade* reported that:

Col. H. A. MOORE took up this property some fifteen years ago and did enough development work on it to convince him that the quantity was there. Through misfortune he has been unable to do anything with the mine until the present, but his faith in it never wavered and he has hung on with a grip that could not be loosened. There has been incorporated The National Coal & Iron Co. to develop this mine, and from information received we are assured that coal will be shipped from the mine by January 1, 1904. Mr. MOORE will soon return here to reside and will bring with him machinery for sinking a shaft and other necessary machinery. (1903)

The mine is located on the southwestern shore of Lake Whatcom (Figure 1). The land in the area of the mine rises abruptly from the shoreline, and is reported to have been densely forested in 1923 (Jenkins 1923).

A total of five coal seams are reported to be present at the mine, having an average strike of north 52° west and dip of 41° southwest. Of these seams, only the seams designated vein No. 3, vein No. 4, and vein No. 5 were prospected or mined. The majority of the coal was mined from vein No. 3. (Jenkins 1923)

The following description of the mine workings is from Jenkins:

Tunnel No. 1 is located on vein No. 3, about 500 feet west of Rocky Ridge landing at an elevation of 4 feet above the lake. The direction of this tunnel is S. 30° W.

Slope No. 1 on vein No. 3 is located 200 feet east of tunnel No. 1, and 33 feet in elevation above the lake. This slope follows the coal, which dips 40°, bearing S. 38° W., for 100 feet, but is now partially filled by caving. It is reported that the coal seam was 6 feet thick. The hanging wall is massive sandstone.

Tunnel No. 2 on vein No. 3 is 250 feet west of Rocky Ridge landing and 10 feet above the lake. Coal was taken from this tunnel by Harry Moore many years ago. The dump from this tunnel touches the edge of the lake, and weathered fragments of coal lie along the shore.

Slope No. 2 on vein No. 3 is located at a point 170 feet southwest of Rocky Ridge landing and 72 feet in elevation above the level of the lake. It follows the coal which dips 41°, S. 38° W., connecting, by a drift, 120 feet from the surface, tunnels numbers 1 and 2 driven on the same vein.

Vein No. 4 lies above vein No. 3 at a stratigraphic distance of 149 feet. The dip of this seam is 41°, S. 38° W. This dip is identical with that of vein No. 3, taken at slope No. 2. The location of this opening is 127 feet in elevation above the lake level. The distance between the walls of the slope is 7 feet. Coal is reported to be present throughout this 7 feet, but not in solid form, alternating in layers with shale, bone, etc. The slope is said to be 55 feet long, but at the time of this investigation it was filled with water.

Vein No. 5 lies stratigraphically 99 feet above vein No. 4. A prospect, known as slope No. 1, on vein No. 5, is located at a point 400 feet southwest of Rocky Ridge landing and at an elevation of about 100 feet above the lake level. It follows vein No. 5, which dips 40° in the direction of S. 38° W. The slope was filled with water at the time of the investigation, but it is reported that the seam contained 4 feet of coal and two feet of shale. (1923)

The first owner of the Rocky Ridge Mine was Harry Moore (Vonheeder 1975). No other owners of the mine have been identified. Despite considerable effort, the physical location of the Rocky Ridge Mine could not be determined (see “START-2 ACTIONS” section below). For these reasons, the ownership history of the Rocky Ridge Mine could not be determined.

## **SITE OPERATIONS AND WASTE CHARACTERISTICS**

As stated above, the majority of the coal at the Rocky Ridge Mine was mined from the workings on vein No. 3. The coal was removed from the mine in cars and dumped into a chute which carried it down to the bunkers near the shore of Lake Whatcom (Jenkins 1923). From the bunkers, the coal was transported by boat to the west end of Lake Whatcom where it was stockpiled for further shipment or used locally (Jenkins 1923; Vonheeder 1975).

Little else is known about its operational history, and production history is obscure (Vonheeder 1975). The mine was considered “never a very important operation” (Moore 1973). Based upon a proximate analysis of a coal sample from the mine workings analyzed by Hansen and Stewart, as reported by Jenkins (1923), Vonheeder (1975) concludes that “with the high ash content and relatively low heating value when compared to other coals available around the Bellingham area, it is probably safe to say that the Rocky Ridge coal was noncompetitive when considered on a commercial-volume basis.” Based on this information, it is likely that coal mining activities at the Rocky Ridge Mine were limited.

It is reported that the Rocky Ridge Mine was “inaccessible” and “nothing is to be seen but the remains of some old dumps” at the time of a 1958 geological survey of the coal deposits of the area (USSRAM 1958).

## **START-2 ACTIONS**

To obtain information about coal mining in the Bellingham/Lake Whatcom area, including the area of the Rocky Ridge Mine, START-2 reviewed numerous reports, maps, and other documents. In addition, START-2 conducted interviews with representatives of federal, state, and local agencies; representatives of academic institutions; and owners or representatives of properties in the vicinity of the former coal mining activities. A list of these data sources for the Bellingham/Lake Whatcom Coal Mines PA/pre-CERCLIS screening project is provided in Appendix A.

Little documentation or other information regarding the Rocky Ridge Mine was obtained as a result of the information gathering efforts. All pertinent information gathered has been incorporated into this trip report, and was used to guide efforts to physically locate the mine during site reconnaissance visit performed by START-2. On May 15, 2003, START-2 and representatives from the EPA visited the vicinity of the Rocky Ridge Mine to attempt to locate features of the former mine. The area was observed to be developed for residential use. No evidence of coal mining was noted.

## **CONCLUSIONS**

Available historical information indicates that coal mining activities at the Rocky Ridge Mine were limited. No evidence of coal mining activities were noted during the May 15, 2003 site visit. No sources or evidence of contamination of any kind (e.g., stained soil, distressed vegetation) were observed during the site visits.

Source: Maptech, Inc. 2001.

WASHINGTON



BELLINGHAM/LAKE WHATCOM COAL MINES  
Whatcom County, Washington

Figure 1  
SITE VICINITY MAP  
ROCKY RIDGE MINE

Date: 9/16/04	Drawn by: AES	10:START-2\03010002\fig 1
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**APPENDIX A**  
**PROJECT DATA SOURCES**

## PROJECT DATA SOURCES:

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**PROJECT DATA SOURCES:**

**RESEARCH FACILITY CONTACTS**

Bellingham Public Library  
210 Central Avenue  
Bellingham, Washington 98225  
Margaret Ziegler, Reference Librarian

Center for Pacific Northwest Studies/Washington State Archives: Northwest Regional Branch  
Goltz-Murray Archives Building  
Western Washington University  
Bellingham, Washington 98225-9123

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