



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor  
Toni Hardesty, Director

January 5, 2012

Mr. Scott Sanner  
U.S. Bureau of Land Management  
Coeur d'Alene District  
3815 Schreiber Way  
Coeur d'Alene, ID 83815

Subject: Site Assessment of the Alamance Mine, Elk City Mining District,  
Idaho County, Idaho

Dear Mr. Sanner:

The Idaho Department of Environmental Quality (DEQ) has completed a review of historical mining data and geological information for the above referenced mine, located near Elk City, Idaho. Subsequent to that review, DEQ conducted a site visit of the Alamance Mine.

During the site visit, mining activities such as trenches and waste dumps were observed and photographed in order to provide a comprehensive analysis necessary to complete an Abbreviated Preliminary Assessment.

Preliminary Assessments are conducted by DEQ according to the Federal Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA). The reasons to complete a Preliminary Assessment (PA) include:

- 1) To identify those sites which are not CERCLIS caliber because they do not pose a threat to public health or the environment (No Remedial Action Planned (NRAP));
- 2) To determine if there is a need for removal actions or other programmatic management of sites;
- 3) To determine if a Site Investigation, which is a more detailed site characterization, is needed; and/or
- 4) To gather data to facilitate later evaluation of the release of hazardous substances through the Hazard Ranking System (HRS).

Mr. Scott Sanner  
January 5, 2012  
Page 2

DEQ has also completed PAs under contract with the U.S. Environmental Protection Agency in order to identify risks to human health and the environment, and make recommendations to land owners regarding how risks might be managed, if necessary.

During a DEQ field visit if sources, pathways, and receptors are identified for heavy metal contamination and samples are collected, a PA is generally written. If there is no evidence of receptors being influenced by sources of contamination, as was the case with the Alamance Mine property, then an Abbreviated Preliminary Assessment (APA) is written.

Attached is the Abbreviated Preliminary Assessment for the Alamance Mine. The APA includes limited historical and geological information, photographs, and a map of the property. This information was used by DEQ to make a determination that the property status is No Remedial Action is Planned (NRAP).

DEQ also observed there were remedial actions conducted on the Alamance Mine site. Thank you for answering my questions regarding those efforts.

DEQ looks forward to addressing any questions you may have regarding our findings. Please contact me (208-373-0563) if you have any comments, questions, or if I may be of any other assistance.

Thank you for giving us permission to access your property; it is truly a very nice location.

Sincerely,



Tina Elayer  
Mine Waste Program Specialist  
Waste Management and Remediation Division

#### Attachments

cc: Ken Marcy – U.S. EPA  
Daniel Stewart – DEQ Grangeville  
Alamance Mine File

## ABBREVIATED PRELIMINARY ASSESSMENT

This is an Abbreviated Preliminary Assessment (APA) for the Alamance Mine near Elk City, Idaho. This document provides the rationale for the determination of No Remedial Action Planned (NRAP) and that no additional analysis or site investigation is necessary for the Alamance Mine. Additional sheets are attached which contain relevant information including historical and geologic information, photographs, a map, and references generated during the site visit or desktop research.

**Preparer:** Daniel D. Stewart **Date:** 12/2/11  
Idaho Department of Environmental Quality  
300 W. Main  
Grangeville, ID 83530  
(208) 983-0808  
daniel.stewart@deq.idaho.gov

**Site Name:** Alamance Mine

**Previous Names (aka):** Blue Dragon, Alliance, Allamance

**Site Owner:** U.S. Bureau of Land Management

**Address:** U.S. Bureau of Land Management – Coeur d’Alene District  
Attention: Scott Sanner  
3815 Schreiber Way  
Coeur d’Alene, ID 83815

**Site Location:** Access to the mine from the Elk City Ranger Station is via County Road 443 approximately 1.15 miles northeast to the junction with FS Road 1809. The mine is 1,100 feet south of this intersection on BLM land.

Township 29 North, Range 8 East, Section 24

**Latitude:** 45.84111°N **Longitude:** -115.41694°W

### **Describe the release (or potential release) and its probable nature:**

The Alamance Mine was investigated by the Idaho Department of Environmental Quality (DEQ) on September 8, 2011 for potential releases of heavy metals by airborne, surface or ground water pathways. Additionally, potential discharges of other deleterious materials, such as petroleum products and ore processing chemicals were investigated. No evidence or indications of sources for these materials was located on site. The site was dry with the closest water (American River) over 210 yards away. No direct surface water pathways existed from the mining area to the river.

**Part 1 - Superfund Eligibility Evaluation**

<b>If all answers are “no” go on to Part 2, otherwise proceed to Part 3.</b>	<b>YES</b>	<b>NO</b>
1. Is the site currently in CERCLIS or an “alias” of another site?		<b>x</b>
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?	<b>x</b>	
3. Are the hazardous substances that may be released from the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?		<b>x</b>
4. Are the hazardous substances that may be released from the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?		<b>x</b>
5. Is there sufficient documentation to demonstrate that there is no potential for a release that constitutes risk to human or ecological receptors? <i>(e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance releases have occurred, or an EPA approved risk assessment completed)?</i>	<b>x</b>	

**Please explain all “yes” answer(s):**

A site inspection involving direct observations confirmed that contaminants of concern including hazardous materials and petroleum products do not exist in concentrations that present a threat to human health or the environment. No contaminants or hazardous substances remain on the site. No surface water, ground water or airborne pathways were detected. With the exception of recent, but minimal disturbances, the site is well vegetated and stable.

The U.S. Bureau of Land Management (BLM) conducted remediation work at the Alamance Mine site in September of 2011 which included filling the two shafts with fill material.

See the photographs at the end of this report.

**Part 2 - Initial Site Evaluation**

For Part 2, if information is not available to make a “yes” or “no” response, further investigation may be needed. In these cases, determine whether an APA is appropriate. Exhibit 1 parallels the questions in Part 2. Use Exhibit 1 to make decisions in Part 3.

<b>If the answer is “no” to any of questions 1, 2, or 3, proceed directly to Part 3.</b>	<b>YES</b>	<b>NO</b>
1. Does the site have a release or a potential to release?		<b>x</b>
2. Does the site have uncontained sources containing CERCLA eligible substances?		<b>x</b>
3. Does the site have documented on-site, adjacent, or nearby targets?		<b>x</b>

<b>If the answers to questions 1, 2, and 3 above were all “yes” then answer the questions below before proceeding to Part 3.</b>	<b>YES</b>	<b>NO</b>
4. Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?		
5. Is there an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site?		
6. Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but there are nearby targets (e.g., targets within one mile)?		
7. Is there no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site?		

**Notes:**

The Alamance Mine was a dry site with no mining related water present and no active surface water sources. Thus, it is unlikely any human health risks or ecological health risks are associated with this mine site. No surface water, ground water or airborne pathways were observed in the mining area.

During the site assessment, DEQ used references from several different documents including U.S. Geological Survey (USGS) maps, county tax rolls, and historical reports that have spelled numerous claim names, town sites, and/or geographic features differently from one and another. DEQ’s use of the different spellings is to remain in context with the reference used for each given section of text or written in this report.

## Exhibit 1 – Site Assessment Decision Guidelines for a Site

Exhibit 1 identifies different types of site information and provides some possible recommendations for further site assessment activities based on that information. The assessor should use Exhibit 1 in determining the need for further action at the site, based on the answers to the questions in Part 2. Please use your professional judgment when evaluating a site. Your judgment may be different from the general recommendations for a site given below.

Suspected/Documented Site Conditions		APA	Full PA	PA/SI	SI
1. Releases or potential to release are not documented at the site.		Yes			
2. Uncontained sources with CERCLA-eligible substances have not been documented as being present on the site. (i.e., they do exist at site)		Yes			
3. On-site, adjacent, or nearby receptors are not present.		Yes			
4. There is no documentation or observations made leading to the conclusion that a sensitive receptor is present or may have been exposed (e.g., drinking water system user inside four mile target distance limit (TDL)).	Option 1: APA	Yes			
5. There is documentation that a sensitive receptor has been exposed to a hazardous substance released from the site.	Option 2: Full PA or PA/SI	No			
6. There is an apparent release at the site with no documentation of targets, but there are targets on site or immediately adjacent to the site.	Option 1: APA SI	No			
	Option 2: PA/SI	No			
7. There is an apparent release and no documented on-site targets and no documented targets immediately adjacent to the site, but there are nearby targets. Nearby targets are those targets that are located within one mile of the site and have a relatively high likelihood of exposure to a hazardous substance migration from the site.		No			
8. There are: no indications of a hazardous substance release; uncontained sources containing CERCLA hazardous substances; but there is a potential to release with targets present on site or in proximity to the site.		No			

**Part 3 - DEQ Site Assessment Decision**

When completing Part 3, use Part 2 and Exhibit 1 to select the appropriate decision. For example, if the answer to question 1 in Part 2 was “no,” then an APA may be performed and the “NRAP” box below should be checked. Additionally, if the answer to question 4 in Part 2 is “yes,” then you have two options (as indicated in Exhibit 1): Option 1 -- conduct an APA and check the “Lower Priority SI” or “Higher Priority SI” box below; or Option 2 -- proceed with a combined PA/SI assessment.

**Check the box that applies based on the conclusions of the APA:**

<input checked="" type="checkbox"/>	No Remedial Action Planned (NRAP)	Defer to NRC
<input type="checkbox"/>	Higher Priority SI	Refer to Removal Program
<input type="checkbox"/>	Lower Priority SI	Site is being addressed as part of another CERCLIS site
<input type="checkbox"/>	Defer to RCRA Subtitle C	Other:

**DEQ Reviewer:**

*[Handwritten Signature]*  
Daniel D. Stewart

*11/5/2012*  
Date

**Please Explain the Rationale for Your Decision:**

A site inspection involving direct observations confirmed that contaminants of concern including hazardous materials and petroleum products do not exist in concentrations that present a threat to human health or the environment.

No visible signs of adits or shafts remain on the site. No safety hazards were observed. The two waste dumps were composed of country rock with no mineralization evident and no sulfide smell.

With the exception of some recent, minor disturbances which appear to be reclamation efforts, the site is well vegetated and stable. Plants showed no signs of stress. Trees in excess of 50 feet now cover much of the mined/disturbed area. No surface water, ground water or airborne pathways existed. The closest water source is over 210 yards away with no pathways to it. Thus, it is unlikely any human health risks or ecological health risks are associated with this mine site.

As a result of DEQ’s research and observations, it is recommending the Alamance Mine site be designated as NRAP.

**Attachments:**

- Historical and Geologic Information
- Site Conditions and Photographs
- Map
- References

This page intentionally left blank for double-sided printing.

## Historical and Geologic Information

**Mine History:** Shenon and Reed (1934) described the Allamance Mine as follows:

*The Allamance, formerly the Blue Dragon, lies along the American River a little more than 1.1 miles northeast of the Buster Mine. Three well defined veins occur on the property, but only one has been productive. According to Thomson and Ballard, the Allamance vein is 4 to 5 feet thick. It is said that a shoot in the Allamance vein produced a little very rich ore in the early days of the camp. The total production is reported to be about \$30,000.*

*Two nearly parallel veins crop out a short distance south of the productive vein. They strike east and dip 85 degree S. Because they are more resistant to erosion than the encircling wall rocks they stayed slightly above the surface. These veins are about 3 feet in width and are exposed along the strike for several hundred feet. They consist of white quartz characterized by marked comb structures. Irregularly distributed cavities indicate the former presence of sulfides.*

**Geologic Features:** The Idaho Geologic Survey (IGS 2003) offered the following geologic description of the Alamance Mine:

*The Alamance Mine is in the biotite gneiss and schist unit of the Middle or Early Proterozoic Elk City metamorphic sequence (Lewis and others, 1990, 1993). The property contains three well-defined veins, one of which was productive (Shenon and Reed, 1934). The productive vein was 4-5 feet wide. The two non-productive veins, which are south of the productive one, strike nearly east-west and dip steeply south (Thomson and Ballard, 1924; Shenon and Reed, 1934). The nonproductive veins are probably on the Major Claim (EC-9; Thomson and Ballard, 1924).*

The following is the Thomson and Ballard (1924) description of the Allamance Mine:

*The Major claim covers "twin" quartz veins which strike practically due east and dip to the south at a high angle. The dip of the two veins is however not exactly parallel so that they may come together at depth. As exposed by shallow cuts on the surface, these veins are from 2 to 5 feet wide. This claim lies between the Buster-Congress vein system on the south and the Allamance vein on the north. The Allamance is from 4 to 5 feet wide and practically parallel to the other two. It is reported to have produced a small quantity of very rich ore in the early days of the camp.*

*The two Major veins and the Allamance vein are intersected by a north and south fault of apparently rather small throw so far as can be estimated from surface indications.*

This page intentionally left blank for double-sided printing.

## Site Conditions and Photographs

It appears the site for the Alamance has been undergoing remedial actions. According to Scott Sanner, the BLM has been addressing physical hazards such as filling in the two shafts with fill material. This work occurred in September 2011 (Scott Sanner, *pers. comm.*).

Extensive trenching and disturbances occurred in the area. Many of the trenches run parallel to the hill slopes. The total disturbed area due to mining is less than two acres. Some of this disturbance may be a result of the remedial efforts. The area is very well vegetated with mature trees, grasses, and brush dominating the area.

All of the Alamance Mine photographs in this section were taken by DEQ on September 8, 2011.



**Photo 1.** Some of the extensive trenching and disturbances in the area.



**Photo 2.** Appears to be a collapsed shaft with headframe and old cars.



**Photo 3.** Area was well vegetated with mature trees and grass. Some of the trees are 50-60 feet in height and are growing throughout the mined area.



**Photo 4.** Close-up of one of the numerous ditches throughout the area.

Waste piles/dumps are scattered throughout the area. The waste dumps consist of country rock with no mineralization evident. No evidence of sulfides was encountered during the survey.



**Photo 5.** This waste pile/dump was approximately 80 cubic yards in volume.

A road runs across the other end of the waste dump shown in Photo 6 and evidence of a bulldozer flattening the top of the waste dump was observed. No evidence of the shaft or adit which produced this waste was detected. The dump was composed of country rock with no evidence of mineralization or sulfides.



**Photo 6.** Waste dump of approximately 500 cubic yards.



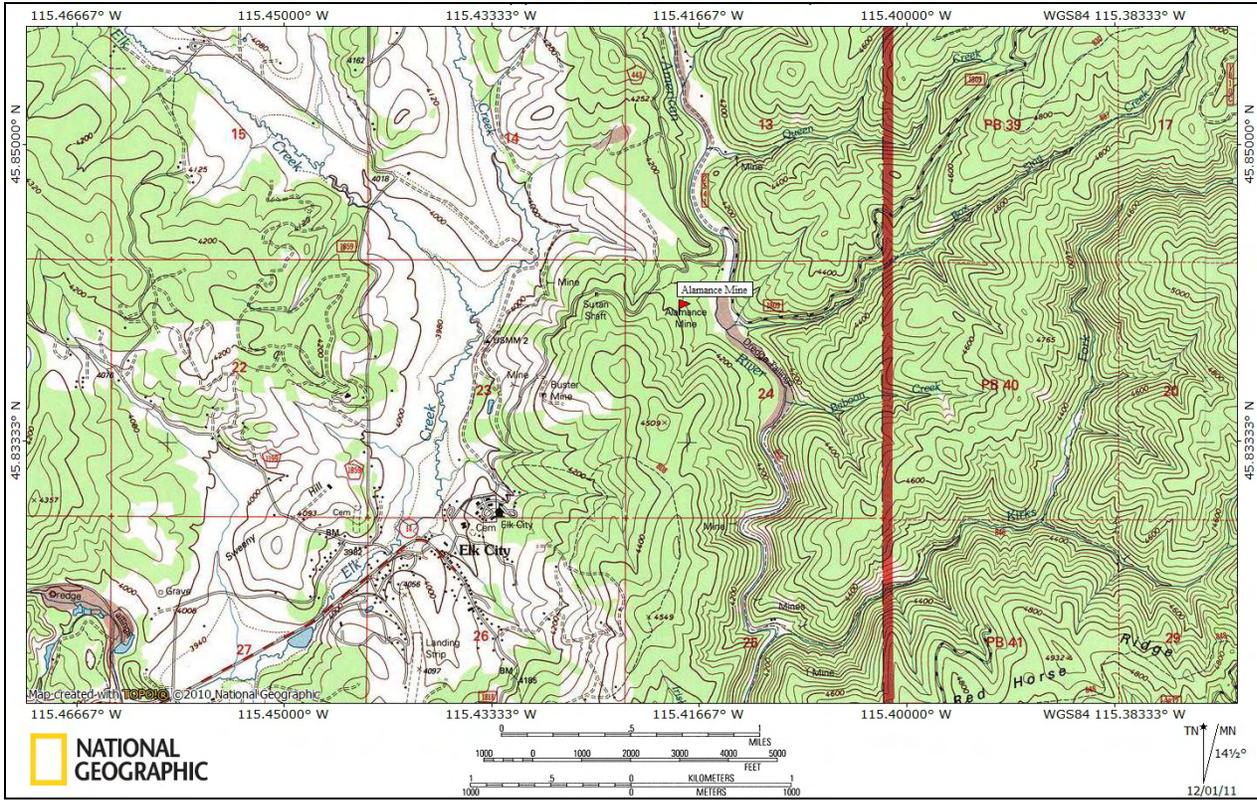
**Photo 7.** Building and mining debris left behind from the mining operation.



**Photo 8.** One of many trenches or collapsed adits seen at the mine site.  
Now well vegetated and stabilized.

This page intentionally left blank for double-sided printing.

# Map



**Figure 1.** Topographic Overview Map of the Alamance Mine Location  
(Map Source: National Geographic Topographic Software)

This page intentionally left blank for double-sided printing.

## References

- IGS (Idaho Geological Survey). Erdman, Ted, John Kauffman, Earl H. Bennett, and Victoria E. Mitchell. 2003. *Site Inspection Report for the Abandoned and Inactive Mines in Idaho on U.S. Forest Service Lands (Region 1) Nez Perce National Forest. Volume III, Section A: Elk City, Orogrande, Buffalo Hump, and Surrounding Areas, Idaho County, Idaho.* Prepared for the U.S. Forest Service Under Participating Agreement No. FS-01-96-14-2800. Staff Report 03-21.
- Sanner, Scott. U.S. Bureau of Land Management. 2011. Personal Communications.
- Shenon, P.J., and J.C. Reed. 1934. Geology and Ore Deposits of the Elk City, Orogrande, Buffalo Hump, and Tenmile Districts, Idaho County, Idaho: U.S. Geological Survey Circular 9, 89 p.
- Thomson, Frances A. and Samuel M. Ballard. 1924. Idaho Bureau of Mines and Geology. Geology and Gold Resources of North Central Idaho. Bulletin No. 7.
- Topographic Overview Map of the Alamance Mine Location. 12/1/2011. 1:24,000. Daniel Stewart; National Geographic Topographic Software.  
<http://shop.nationalgeographic.com/ngs/product/topo%21-state-series/topo%21-idaho>