



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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

C.L. "Butch" Otter, Governor  
Curt Fransen, Director

March 28, 2012

Mr. Ken Marcy  
U.S. Environmental Protection Agency  
12928 SW 276<sup>th</sup> Street  
Vashon, WA 98070

RE: Abbreviated Preliminary Assessment Report for the South Fork Mine,  
Idaho County, Idaho

Dear Mr. Marcy:

Attached is an Abbreviated Preliminary Assessment (APA) for the South Fork Mine near Elk City, Idaho. The Idaho Department of Environmental Quality (DEQ) made several attempts to request access from the landowner of the South Fork Mine, but permission was never granted.

The South Fork Mine was investigated by the Idaho Geological Survey (IGS) on August 13, 1999. IGS reported the site has three adits, two collapsed and one open. The open adit is dry. Two of the adits have collapsed. IGS collected a water sample from the one adit that was discharging water for analysis.

The water sample exceeded the primary MCL for arsenic in the EPA 200.8 test. No other water quality standards were exceeded. This result is not remarkable and is common for highly mineralized areas.

The IGS report contained no information indicating any environmental concerns were observed or documented. The waste dumps observed by IGS were relatively small and vegetated. This would indicate no potential releases of heavy metals by airborne, surface water or ground water existed which would cause any human health risks or ecological health risks. Additionally, potential discharges of other deleterious materials, such as petroleum products and ore processing chemicals would have been investigated had they existed.

At the time of the IGS site visit there were two small, plywood-sided sheds just east of the open adit. This adit could also be entered for several feet underground.

If the adit is still open and unrestricted, it could be a dangerous physical hazard. DEQ recommends the adit should be closed or have access eliminated.

Mr. Ken Marcy  
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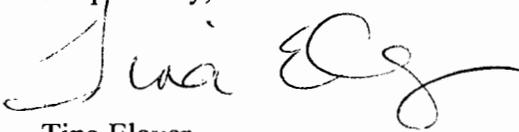
As a result of the above information, **DEQ recommends that the property status of the South Fork Mine be designated as No Remedial Action Planned (NRAP).**

A link to DEQ's South Fork Mine APA can also be found on DEQ's Mining Preliminary Assessment Web page at:

<http://www.deq.idaho.gov/waste-mgmt-remediation/remediation-activities/mining-preliminary-assessments.aspx>

If you have any questions about this site, the report, or DEQ's recommendations, please do not hesitate to call me at (208) 373-0563.

Respectfully,

A handwritten signature in black ink, appearing to read "Tina Elayer", with a stylized flourish at the end.

Tina Elayer  
Mine Waste Specialist

attachment

cc: Mr. Scott Sanner, BLM  
Clint Hughes, USFS  
South Fork Mine APA File

## ABBREVIATED PRELIMINARY ASSESSMENT

This is an Abbreviated Preliminary Assessment (APA) for the South Fork 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 South Fork Mine. The information to produce this document was taken from the 2003 Idaho Geological Survey (IGS) report. A map generated during desktop research is attached.

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

**Date:** 3/20/12

**Site Name:** South Fork Mine

**Previous Names (aka):** South Fork Group; Claims: South Fork No. 1, South Fork No. 2, South Fork No. 3, South Fork No. 4, Gilt Edge, Gilt Edge Fraction, Butt in No. 1, Butt in No. 2, Candle Stick, Candlestick No. 1, and Spokane Lodes

**Site Owner:** Unknown. DEQ was unable to access the property after various attempts to contact the property owner were unsuccessful. Idaho County records indicate an attorney's address in Grangeville, ID as the contact. DEQ spoke with him numerous times but was unable to get the owners name and/or address.

**Address:** NA

**Site Location:** From IGS 2003:  
*The mine is 300-500 feet north of State Highway 14 at mile post 42. The road to the mine leaves the highway 500 feet west of the draw where the mine is located. Most of the workings are on patented claims.*

Township 29 North, Range 7 East, Section 24

**Latitude:** 45.83009°N      **Longitude:** -115.54028°W

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

The South Fork Mine was investigated by IGS on August 13, 1999 and reported the following:

*The site has three adits, two collapsed and one open. Several roads in the area provide access to the adits. An old power line crossing the area has mostly fallen to the ground.*

*Adit 1, the uppermost of the three, is completely collapsed and forms a large scarp. The dump is 50 feet long, 30 feet wide, and 10 feet thick. There is a more recent mound of material on the old dump surface. Several bulldozer roads and cuts disturb the area between Adit 1 and Adit 2.*

*Adit 2, the middle of the three adits, is open at the portal and remains open underground for at least 10-15 feet. The adit has several sets of timbers near the portal. A wooden dam across the portal was probably constructed to hold back water, although at the time of the visit, the adit was dry. There is abundant scrap metal just east of Adit 2, and two small sheds are across the access road from the adit. The dump measures 40 feet long, 20 feet wide, and 10 feet thick.*

*Adit 3, the lowermost, is completely caved. This adit is discharging water at 1-2 gallons per minute. The dump area is 75 feet long, 35 feet wide, and 15 feet thick.*

Erdman collected a water sample from the third adit:

*The sample exceeded the Primary MCL for arsenic in the EPA 200.8 test. No other water quality standards were exceeded. This result is not remarkable and common for highly mineralized areas.*

The IGS report contained no information indicating any environmental concerns were observed or documented. This would indicate no potential releases of heavy metals by airborne, surface water or ground water pathways existed which would cause any human health risks or ecological health risks. Additionally, potential discharges of other deleterious materials, such as petroleum products and ore processing chemicals would have been investigated had they existed.

**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 by IGS involving direct observations confirmed that contaminants of concern including hazardous materials and petroleum products were not reported 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. No occupied homes or cabins exist on the claim.

**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:**

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 reported by IGS. No occupied homes or cabins exist on the claim. There is no mention of any drinking water sources and no homes are within the drainage or in close proximity. A water sample from Adit 3 was analyzed which exceeded the primary MCL for arsenic; no other water quality standards were exceeded.

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.

<b>Suspected/Documented Site Conditions</b>		<b>APA</b>	<b>Full PA</b>	<b>PA/SI</b>	<b>SI</b>
1. Releases or potential to release are not documented at the site. <b>YES</b>		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) <b>YES</b>		Yes			
3. On-site, adjacent, or nearby receptors are not present. <b>YES</b>		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 TDL). <b>YES</b>	Option 1: APA	Yes			
5. There is documentation that a sensitive receptor has been exposed to a hazardous substance released from the site. <b>NO</b>	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. <b>NO</b>	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. <b>NO</b>		Yes			
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. <b>NO</b>		Yes			

**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:**

*Daniel D. Stewart*  
 Daniel D. Stewart

*3/28/12*  
 Date

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

The 2003 IGS report indicated no areas of concern were found. No homes or cabins exist on the site. No pathways exist relative to human health risks or environmental risks. No drinking water sources or residences exist in the drainage. IGS did not indicate any hazardous or deleterious materials on site. The South Fork Mine site is far from any inhabited area. No structures are on the site. A water sample from Adit 3 was analyzed which exceeded the primary MCL for arsenic; no other water quality standards were exceeded. This result is unremarkable and common for highly mineralized areas.

**As a result of the information contained in this APA, DEQ recommends the property status of the South Fork Mine be designated as No Remedial Action Planned (NRAP).**

**Notes:**

The italicized text below was taken directly from the 2003 IGS report.

*Site Description: The site has three adits, two collapsed and one open. Several roads in the area provide access to the adits. An old power line crossing the area has mostly fallen to the ground.*

*Adit 1, the uppermost of the three, is completely collapsed and forms a large scarp. The dump is 50 feet long, 30 feet wide, and 10 feet thick. There is a more recent mound of*

material on the old dump surface. Several bulldozer roads and cuts disturb the area between Adit 1 and Adit 2.

Adit 2, the middle of the three adits, is open at the portal and remains open underground for at least 10-15 feet. The adit has several sets of timbers near the portal. A wooden dam across the portal was probably constructed to hold back water, although at the time of the visit, the adit was dry. There is abundant scrap metal just east of Adit 2, and two small sheds are across the access road from the adit. The dump measures 40 feet long, 20 feet wide, and 10 feet thick.

Adit 3, the lowermost, is completely caved. This adit is discharging water at 1-2 gallons per minute. The dump area is 75 feet long, 35 feet wide, and 15 feet thick. The total disturbed area for the South Fork Mine covers 5-10 acres.

**Geologic Features:** The South Fork Mine is near the contact between the biotite schist and gneiss unit and the biotite gneiss and schist unit of the Middle or Early Proterozoic Elk City metamorphic sequence. It is associated with a northeast-trending fault that offsets the contact between these two units (Lewis and others, 1990, 1993). The ore was in a white or bluish, massive quartz vein that contained pyrite, arsenopyrite, galena, and chalcopyrite (Shenon and Reed, 1934).

**History:** The South Fork Mine was discovered in 1905 by E. E. Espy. Between 1906 and 1909, the mine was partly owned by Mr. Adams and Frank Peck. In 1909, Peck sold his interest to W. Stowell, who operated the mine from 1909 to 1913. Between 1905 and 1916, the mine produced a total of 6,036 ounces of gold and 1,529 ounces of silver from 11,639 tons of ore (Shenon and Reed, 1934). Stowell's company, the Elk City Mines Corporation, was incorporated in 1910. The mine produced steadily from 1909 to 1913 and was the largest producer in the district in 1912. The ore was processed in a 15-tpd five-stamp mill. By 1913, the mine had 3,000 feet of tunnels and 500 feet of inclines. Elk City Mines forfeited its corporate charter in 1914.

A new company, the South Fork Mining and Milling Company, was incorporated in 1914. The officers included many of the same people as Elk City Mines. South Fork Mining did little more than assessment work for the next decade. Lessees operated part of the property in at least 1916 and 1917. In 1922, the property had about 3,500 feet of workings, including 1,000-foot, 1,050-foot, and 1,200-foot tunnels. In 1928, the company reported seven tunnels and one shaft, but still only 3,500 feet of workings. Five of the claims had been patented sometime in the previous year. South Fork Mining forfeited its corporate charter in 1927.

Stowell Gold Mining Company was incorporated in 1926, again with many of the same officers. The mortgage on the property was foreclosed in 1930, and Stowell Gold Mining forfeited its corporate charter in 1932. In 1945, Minerals Exploration and Research, Inc. (ME&R), purchased the "Stowell claims" of the South Fork property from W. H. Stowell, the son of the original owner; other claims were purchased from their various owners. ME&R was authorized to do business in Idaho in 1947.

*University of Idaho students conducted a geologic study at the mine in June 1948. The company forfeited its charter in 1949.*

*Mr. and Mrs. R. W. Larson acquired the property in the early 1950s. Alpine Minerals Corporation (incorporated in 1983) optioned the mine in 1983. Alpine reopened the two lower tunnels and a raise from the No. 2 tunnel to the surface. The work stopped near the end of the 1986 field season due to lack of funds, and Alpine forfeited its corporate charter in 1989.*

**Water Sample:** *Sample E8139901 was taken from the stream discharging from Adit 3. Sample E8139901 from Adit 3 exceeds the Primary MCL for arsenic in the EPA 200.8 test. No other water quality standards are exceeded. This result is not remarkable and common for highly mineralized areas.*

**Structures:** *There are two small, plywood sided sheds just east of Adit 2.*

**Safety:** *Adit 2 can be entered for several feet underground.*

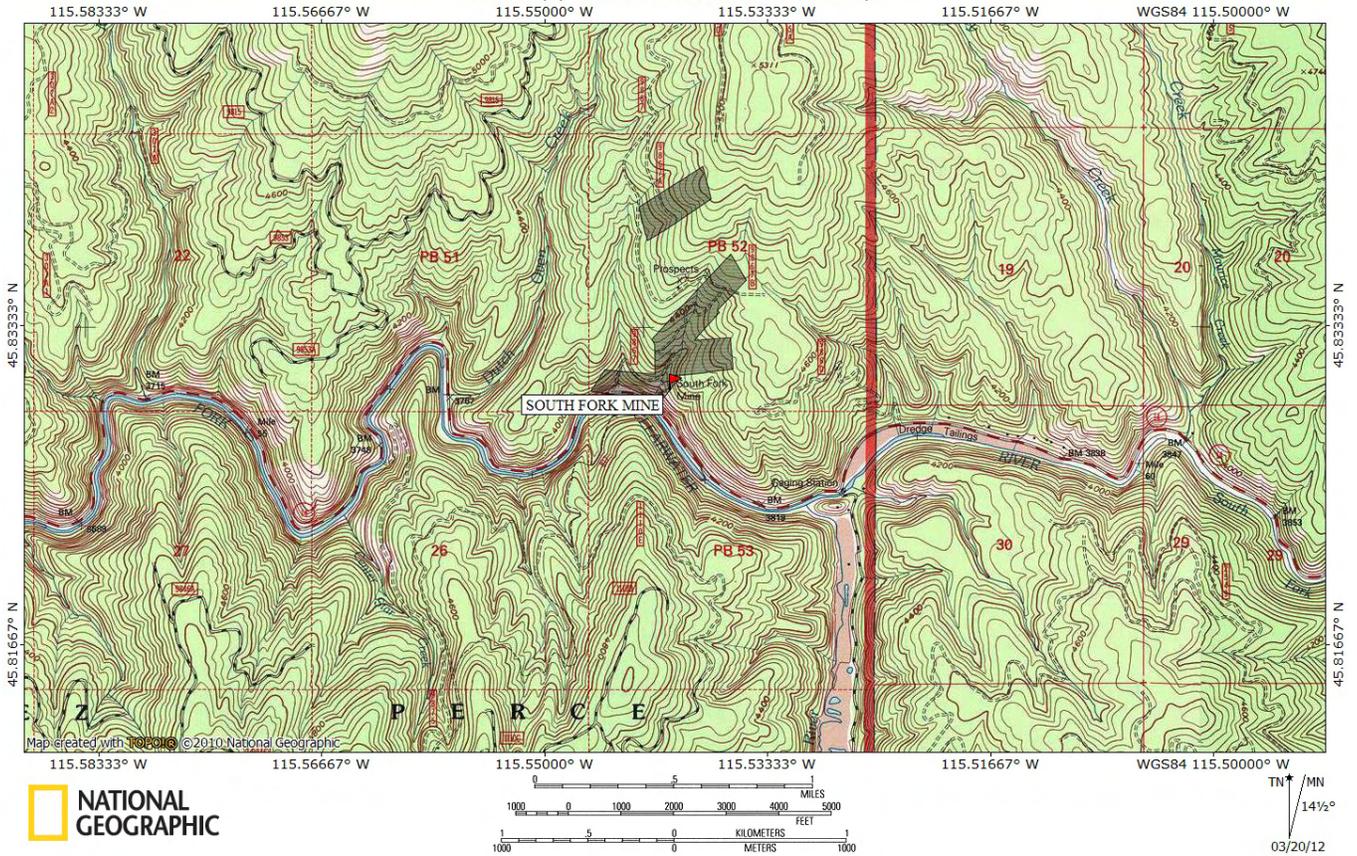
If the adit is still open and unrestricted, it could be a dangerous physical hazard. DEQ recommends the adit should be closed or have access eliminated.

#### **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 C: 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 03-23.

Topographic Overview Map of the South Fork Mine Location. 10/25/2011. 1:24,000. Daniel Stewart; National Geographic Topographic Software.  
<http://shop.nationalgeographic.com/ngs/product/topo%21-state-series/topo%21-idaho>

**Attachment:**  
Map



**Topographic Overview Map of the South Fork Mine Location  
(Map Source: National Geographic Topographic Software).**