March 28, 2012

Mr. Kevin Tomlinson  
Black Swan Development  
171 Highway 95 N  
Grangeville, ID 83530

RE: Abbreviated Preliminary Assessment of the Bengal Mine,  
Elk City Mining District, Idaho County, Idaho

Dear Mr. Tomlinson

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. On September 21, 2011, DEQ conducted a site visit to the Bengal Mine. During the site visit, mining activities such as a waste dump and collapsed adit were observed and mapped in order to provide a comprehensive analysis necessary to complete an Abbreviated Preliminary Assessment Report.

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).
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 Bengal Mine, then an Abbreviated Preliminary Assessment (APA) is written.

Attached is the Abbreviated Preliminary Assessment for the Bengal Mine. The APA includes limited historical and geological information, photographs, and a map with the location of the property.

This information was used by DEQ to recommend the property status of the Bengal Mine be designated as No Remedial Action Planned (NRAP).

DEQ looks forward to addressing any questions you may have regarding our findings. Please contact me (208-983-0808) if you have any comments, questions, or if I may be of any other assistance.

Sincerely,

Daniel Stewart
Watershed Monitoring Coordinator

Attachment

cc: Ken Marcy – EPA
    Bengal Mine File
ABBREVIATED PRELIMINARY ASSESSMENT

This is an Abbreviated Preliminary Assessment (APA) for the Bengal 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 Bengal Mine. Additional sheets are attached which contain relevant information including historical information, photographs, a map, and references generated during the site visit or desktop research.

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

Date: 10/25/11

Site Name: Bengal Mine

Site Owner: Bennett Lumber Products, Inc.

Address: c/o Kevin Tomlinson
Black Swan Development
171 Highway 95 N
Grangeville, ID  83530

Site Location: The Bengal Mine is approximately .06 miles north of County Road 222 (Elk City-Red River Road) and approximately 3.5 miles southeast of the junction with State Highway 14 and the old Bennett Lumber Mill site. The mine is on Bennett Lumber Products, Inc. property.

Township 29 North, Range 8 East, Section 36

Latitude: 45.80751°N Longitude: -115.41379°W

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

The Bengal Mine was investigated by the Idaho Department of Environmental Quality (DEQ) on September 21, 2011 for potential releases of heavy metals by airborne, surface water or ground water pathways. Additionally, potential discharges of other deleterious materials, such as petroleum products and ore processing chemicals were investigated. No deleterious materials, petroleum products or ore processing chemicals were evident at the site.
Part 1 - Superfund Eligibility Evaluation

If all answers are “no” go on to Part 2, otherwise proceed to Part 3.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the site currently in CERCLIS or an “alias” of another site?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>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)?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>4. Are the hazardous substances that may be released from the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>5. Is there sufficient documentation to demonstrate that there is no potential for a release that constitutes risk to human or ecological receptors? (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)?</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Please explain all “yes” answer(s):

A site inspection of the Bengal Mine 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, hazardous substances or equipment remain on the site. Little evidence of mining activities remains. The site was dry and well vegetated. No surface water, ground water or airborne pathways exist to any residences or cabins in the immediate area. There are no public water systems within the 15-mile target distance limit (TDL).
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.

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

<table>
<thead>
<tr>
<th>If the answers to questions 1, 2, and 3 above were all “yes” then answer the questions below before proceeding to Part 3.</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

The Bengal Mine is in an isolated area with no residences or cabins near it. The closest potentially occupied site is 4.2 miles downstream above Red River. The mine area is very well vegetated and a dry site (see photographs at the end of this report). No hazardous substances are on the mining site. The closest public water system is approximately two miles away in Elk City. The Bengal Mine is separated by geology and the American River from Elk City.

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.

<table>
<thead>
<tr>
<th>Suspected/Documented Site Conditions</th>
<th>APA</th>
<th>Full PA</th>
<th>PA/SI</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Releases or potential to release are not documented at the site.</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Uncontained sources with CERCLA-eligible substances have not been documented as being present on the site. (i.e.,他们 do exist at site)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. On-site, adjacent, or nearby receptors are not present.</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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).</td>
<td>Option 1: APA</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. There is documentation that a sensitive receptor has been exposed to a hazardous substance released from the site.</td>
<td>Option 2: Full PA or PA/SI</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>Option 1: APA SI</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. There is an apparent release and no documented on-site targets and no documented targets immediately adjacent to the site. 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.</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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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 I): 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:

<table>
<thead>
<tr>
<th></th>
<th>No Remedial Action Planned (NRAP)</th>
<th>Defer to NRC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Higher Priority SI</td>
<td>Refer to Removal Program</td>
</tr>
<tr>
<td></td>
<td>Lower Priority SI</td>
<td>Site is being addressed as part of another CERCLIS site</td>
</tr>
<tr>
<td></td>
<td>Defer to RCRA Subtitle C</td>
<td>Other:</td>
</tr>
</tbody>
</table>

DEQ Reviewer:

Daniel D. Stewart  
Date: 3/28/12

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.

The photographs included at the end of this report clearly document the disturbed mining areas are very heavily vegetated and stable. Therefore, no airborne pathways exist to any residences or cabins in the immediate area. The Bengal Mine site is an isolated, dry site with no surface water or ground water pathways existing to inhabited structures.

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

Attachments:

Historical Information  
Site Conditions and Photographs  
Map  
References
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Historical Information

Numerous sources were used during desktop research prior to visiting the site. DEQ could not improve or expound upon these reports by writing additional historical or geological text, therefore they were directly referenced and cited.

Mine History: Bell (1912) described the Bengal Mine as follows:

*The Bengal Group, southeast of Elk City, was also being worked, employing a few men on development, and some test runs of its ores were made by a new process at the Elk City Reduction Works that is said to have given excellent results and promises to prove of great value to this and adjacent districts in the economic solution of their metallurgical problems.*
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Site Conditions and Photographs

All of the Bengal Mine photographs in this section were taken by DEQ on September 21, 2011. Little or no waste dump material is evident at Bengal Mine Adit 1 with the exception of what is piled on the left side in Photo 1. Twelve feet of collapsed adit or trench, two feet deep remains. The piled material is country rock which is well vegetated and showing no signs of stress. Scattered pieces of quartz are around the disturbance.

This may have been an exploratory dog hole or trench. The upper part of the disturbance is now part of a logging road. No mineralization is evident. This is a dry site with no water or windborne pathways.

Photo 1. Bengal Mine Adit 1 at Latitude 45.8751°N and Longitude -115.41379°W.
Bengal Mine Adit 2 is a collapsed adit or exploratory trench within 30 feet of Adit 1. Although material is piled along the west side of the disturbance, no waste dump is evident. This material amounts to 2-3 cubic yards. The site is well vegetated with no mineralization evident. No pathways for water or airborne contaminants exist.

![Photo 2. Bengal Mine Adit 2 at Latitude 45.80746°N and Longitude -115.41385°W.](image)

Bengal Mine Adit 3 is a collapsed adit or possibly an exploratory trench or dog hole. It is well vegetated with no plant stress evident. Large rock has been piled to the sides but no substantial waste dump exists. No pathways for water or airborne contaminants exist.

![Photo 3. Bengal Mine Adit 3 at Latitude 45.80651°N and Longitude -115.41344°W.](image)
Bengal Mine Adit 4 may be an exploratory hole. Although material is piled on the sides of the hole, no waste dump exists below the disturbance. No pathways for water or airborne contaminants exist.

Photo 4. Bengal Mine Adit 4 or exploratory hole at Latitude 45.80626°N and Longitude -115.41303°W.
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Figure 1. Topographic Overview Map of the Bengal Mine Location in Idaho County, Idaho (Map Source: National Geographic Topographic Software)
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References

Bell, Robert N. 1912. Fourteenth Annual Report of the Mining Industry of Idaho for the Year 1912.