April 28, 2011

Mr. Clint Hughes  
Minerals Specialist  
USFS – Nez Perce National Forest  
104 Airport Road  
Grangeville, ID 83530

Subject: Site Assessment of the Tonopah Mine, Dixie Area, Idaho County, Idaho

Dear Mr. Hughes:

The Idaho Department of Environmental Quality (DEQ) has completed a review of historical mining data and geological information of the above referenced mixed ownership lands near Dixie, Idaho. During the review, DEQ conducted a site visit to the Tonopah Mine. During the visit information was gathered and observations were made in order to provide a comprehensive analysis necessary to complete an Abbreviated Preliminary Assessment (APA).

The APA is used to help site investigators determine if their findings result in a determination of No Remedial Action Planned (NRAP) or if additional analysis is warranted. The APA documents the rationale for the decision on whether further steps in the site investigation process are required under the Federal Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA). If additional analysis was warranted, a Preliminary Assessment (PA) would have been prepared for this site.

PAs are conducted in accordance with CERCLA. The reasons to complete a PA include:

1) To identify those sites which are not Comprehensive Environmental Response, Compensation, and Liability Information System (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.

No evidence of any open adits, shafts, or mine related workings was seen. It appeared the area has been reclaimed. DEQ was unable to find the exact location of the mine/claims. There was no running water on the site.

Attached is the Abbreviated Preliminary Assessment for the Tonopah Mine. It contains the mine history, limited geological information, a site photograph, and maps of the property. Based on this information, DEQ is recommending the Frank Peck Lode property status be designated as NRAP.

If you have any comments or questions about this site, the report, DEQ’s recommendations, or if I may be of any other assistance, contact me at (208) 373-0554.

Sincerely,

Bruce A. Schuld
Mine Waste Projects Coordinator
Waste Management and Remediation Division

Attachment

cc: Ken Marcy – U.S. Environmental Protection Agency
    Tonopah Mine File
ABBREVIATED PRELIMINARY ASSESSMENT

This is an Abbreviated Preliminary Assessment (APA) for the Tonopah Mine near Dixie, Idaho. This document provides the rationale for the determination of No Remedial Action Planned (NRAP) or if additional analysis or site investigation is necessary for the Tonopah Mine. Additional sheets are attached which contain relevant information including historical data, site photographs, and maps generated during the site visits or desktop research.

Preparer: Daniel D. Stewart  
Idaho Department of Environmental Quality  
300 West Main, Room 203  
Grangeville, ID 83530  
(208) 983-0808  
daniel.stewart@deq.idaho.gov

Date: 3/31/11

Site Name: Tonopah Mine

Previous Names (aka): Tonopah Claims, Tonopah Group

Site Owner: United States Forest Service  
Nez Perce National Forest

Address: 104 Airport Road  
Grangeville, ID  83530

Site Location: The Tonopah Mine is on FS Road 9527B about three quarters of a mile north of the junction with NFD Road 1188.  
Township 26 North, Range 8 East, Section 29

Latitude: 45.5667°N  
Longitude: -115.4931°W

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

This site was investigated for potential releases of heavy metals and sediment from mine waste dumps and potential discharges of other deleterious materials, such as petroleum products and ore processing chemicals. No evidence or indications of these materials were located on site. No evidence of any open adits or shafts or mine related workings was seen. It appeared the area has been reclaimed. The Department of Environmental Quality (DEQ) was unable to find the exact location of the mine/claims. There was no running water on the site. See the photograph in the attachments at the end of the report.
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 involving direct observations confirmed contaminants of concern do not exist in concentrations that present a threat to human health or the environment. No evidence of the Tonopah Mine or any working was noted during the DEQ site visit. No adits or shafts were seen. It appeared the mining area has been reclaimed and trees now cover most of the disturbed area.
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.

If the answer is “no” to any of questions 1, 2, or 3, proceed directly to Part 3.

<table>
<thead>
<tr>
<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>
</tr>
<tr>
<td>2. Does the site have uncontained sources containing CERCLA eligible substances?</td>
<td>x</td>
</tr>
<tr>
<td>3. Does the site have documented on-site, adjacent, or nearby targets?</td>
<td>x</td>
</tr>
</tbody>
</table>

If the answers to questions 1, 2, and 3 above were all “yes” then answer the questions below before proceeding to Part 3.

<table>
<thead>
<tr>
<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>x</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>x</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>x</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>x</td>
</tr>
</tbody>
</table>

Notes:

During the site assessment, DEQ used references from several different documents including 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 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. (Circle or highlight responses)

<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., they 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 Yes</td>
<td></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 No</td>
<td></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 No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Option 2: PA/SI No</td>
<td></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, 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.</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>
Part 3 - EPA 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:

<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:

Bruce A. Schuld  
Date: 4/28/11

Please Explain the Rationale for Your Decision:

There were no direct airborne, surface or ground water pathways to any potable water sources or residences. No evidence of ore or mineralized rock remained at the site. DEQ was unable to find any adits, shafts, or dump sites. It appears the area has been reclaimed and now is covered in trees. No streams, water bodies, or residence are within close proximity to the mine site. The closest residence is approximately 3.5 miles away and is separated from the mine by structural geology.

As a result of our observations, DEQ is recommending this site be designated as “No Remedial Action Planned” (NRAP).

Attachments:
- Historical Information
- Site Photographs
- Maps
Historical Information

Mine History and Geology: The following is taken from *The Dixie Placer District, Idaho, S.R. Capps and Ralph J. Roberts, Pamphlet No. 48, May 1939, Idaho Bureau of Mines and Geology, University of Idaho, Moscow:*

*The Tonopah group of 8 claims, located 2 ½ miles by road west of Dixie, was originally staked in 1897 by Howard Powelson, but is now owned by L. R. Powelson and Gosta Miller. The vein, cutting granite, pegmatite, and quartzite, strikes N. 30 degrees W. and varies from 2 to 8 feet in width. Developments on the ground include a 120 foot adit and two large open cuts excavated by a mechanical scraper. The vein is composed mainly of massive milky quartz through which run veinlets of glass quartz which contain pyrite and possibly some galena. The vein is said to carry an average value of $7.50 to the ton, and the altered wall rock also contains some gold.*

Site Photograph

![Photo 1. Reclaimed and well vegetated material from the Tonopah Mine claims area.](image)
Map 1. Location of Tonopah Mine (Map Source: USGS 24k Quads)
Map 3. Domestic Well and Public Water System Locations. There are two public water systems within the four mile radius; however, the wells are located up gradient from the probably point of entry (PPE) in Sams Creek. Fifteen mile target distance limit (TDL) identified on map. Wetlands run along Big Creek, however they are segregated by structural geology. (Map Source: 2009 Natural Color 1-meter National Agricultural Imagery Program (NAIP) Idaho Map)
Map 4. Sensitive Species within Four Mile Radius and Surrounding Area (Map Sources: SDE Feature Dataset, Animal Conservation Database and Idaho DEQ GIS ArcSDE 9.2 Geodatabase)
Map 5. Sensitive Waterways within Four Mile Radius and Surrounding Area (Map Sources: SDE Feature Dataset, Idaho DEQ GIS ArcSDE 9.2 Geodatabase, 305(b) List. 2009 Natural Color 1-meter NAIP Idaho Map)