Quaker City Mine

(a.k.a., Quaker City patented mining claim)

and Jo Orla Prospect

Preliminary Assessment Report

Blaine County
State of Idaho

Idaho Department of

Environmental Quality

November 2007

Submitted to:
U. S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, WA 98101

December 19, 2007

Mr. Robert P. Dreyer
P.O. Box 4917
Ketchum, Idaho 83340

RE: Site Assessment of the Quaker City Mine (aka Quaker City patented mining claim)

Dear Mr. Dreyer:

The Idaho Department of Environmental Quality (IDEQ) has completed a review of historical mining data and geological information, and subsequent to that review IDEQ conducted a site visit of the Quaker City mine and associated claim. During the site visit, mining facilities were mapped and sampled to complete a Preliminary Assessment (PA).

PAs are conducted according to the federal Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA). The reasons to complete a PA include:

1) To identification 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 through the Hazard Ranking System (HRS)

IDEQ 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.

Based on existing conditions and uses, historic information, and mine waste sample analysis, the IDEQ has determined that No Remedial Action is Planned (NRAP) for this

property. Although IDEQ's Source Water Assessments were used to evaluate potential affects of this mine on public drinking water supplies no inferences can be made about the affects that this and adjoining mines have on local private wells. Furthermore, based on the historical information regarding mine development and production, and sample analysis, IDEQ recommends if you develop the mine site, particularly for residential purposes, you should complete a more thorough site characterization and include risk management provisions in development plans.

IDEQ noted one (1) vertical shaft with an observed depth of approximately six feet and one (1) partially open adit at the Quaker City Mine. These openings are physical hazards that should be managed or closed.

Attached is the Preliminary Assessment Report of the property and mine facilities. The report contains a brief mine history, limited geologic information, maps and additional discussion of observations made at the property. There is also a sample analysis of mine waste dump material and a brief checklist of how IDEQ came to its recommendation that No Remedial Action Are Planned for this property. However, the presence of heavy metals is does warrant active management of the property to assure that releases do not occur than may cause adverse human health or ecological affects.

IDEQ very much appreciates your cooperation and approval for our access, and looks forward to addressing any questions you may have regarding our findings. Please call me if you have any comments, questions, or if I may be of any other assistance. We very much appreciate any feedback you can give us relative to our services.

Sincerely,

Bruce A. Schuld
Mine Waste Projects Coordinator

attachments

cc: Ken Marcie – U.S. Environmental Protection Agency
Megan Stelma – Blaine County
file

SECTION ONE

Introduction

This document presents the results of the Preliminary Assessment (PA) of the Quaker City Mine, aka Quaker City patented mining claim, and unpatented Jo Orla Prospect. The Idaho Department of Environmental Quality (IDEQ) was contracted by Region 10 of the United States Environmental Protection Agency (EPA) to provide technical support for completion of PAs at various mines within the Warm Springs Mining District in Blaine County, Idaho.

IDEQ often receives complaints or information about sites that may be contaminated with hazardous waste. These sites can include abandoned mines, rural airfields that have served as bases for aerial spraying, old landfills, illegal dumps, and abandoned industrial facilities that have known or suspected releases.

In February 2002, IDEQ initiated a Preliminary Assessment Program to evaluate and prioritize assessment of such potentially contaminated sites. Due to accessibility and funding considerations, priority is given to sites where potential contamination poses the most substantial threat to human health or the environment. Priority was also given to mining districts where groups or clusters of sites could be assessed on a watershed basis.

For additional information about the Preliminary Assessment Program, see the following:

http://www.deq.idaho.gov/waste/prog_issues/mining/pa_program.cfm

Access to assess the Quaker City Mine was provided by Mr. Robert Dreyer in February of 2007. Access to the Jo Orla was unrestricted and utilized as a matter of coincidence during the field visit.

SECTION TWO

Ownership	**Claims**
Mr. Robert P. Dreyer P.O. Box 4917 Ketchum, Idaho 83340	Quaker City
United States of America Department of Interior U.S. Bureau of Land Management	Adjoining public lands former unpatented Jo Orla Prospect

Although it appears that the mine workings are beneath patented mining claims, the opening of one prospect and associated waste dump material is located on lands administered by the Department of Interior, Bureau of Land Management (BLM). Furthermore, the patented claim is bordered on the west and north by BLM lands.

Patented Claim evaluated for this PA was selected because of its proximity to the surface expression of the mine workings and its location in the Parker Gulch sub-watershed. Part of this claim extends across Parker Gulch Road.

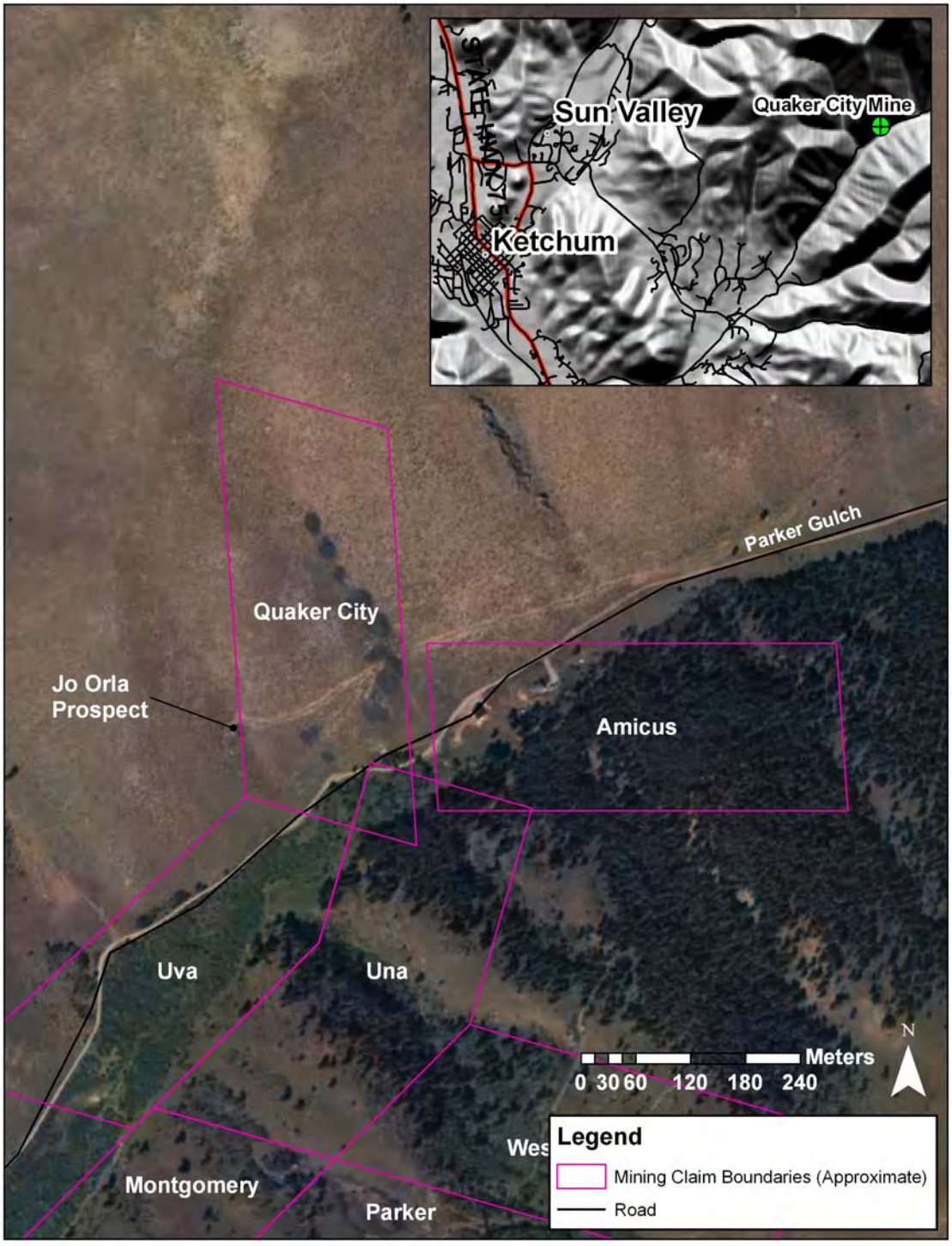
Sun Valley
Quaker City Mine
Ketchum
Parker Gulch
Quaker City
Jo Orla
Prospect
Amicus
Uva
Una
Montgomery
Parker
Meters
0 30 60 120 180 240
N
Legend
Mining Claim Boundaries (Approximate)
Road

Figure 1

SECTION THREE

Site Background

Location

The Quaker City Mine is located on the north side of Parker Gulch approximately 3 miles due east of Sun Valley, Idaho, in Section 10, Township 4 North, Range 18 East of the Boise Meridian, at Latitude 43º 41' 52.90"N, and Longitude 114º 17' 34.26"W. The Jo Orla Prospect lies just outside of the southwestern boundary of the Quaker City patented claim. (see Figure 1).

History

Directly across the valley of Elkhorn Creek from the Parker mine is the Quaker City Mine. It produced very rich tetrahedrite ore, some of it containing as much as 2,000 ounces of silver to the ton. The total production is said to have been about $50,000 (Umpleby, et al 1930, p. 188). The following production data is reproduced from this document.

Table 1 Production of Quaker City mine

(From records of E. Daft and Ketchum smelter)

Year	Ore	Silver	Lead	Year	Ore	Silver	Lead
	Tons	*Fine ounces*	*Pounds*		*Tons*	*Fine ounces*	*Pounds*
1884	29.0	4,458.93	25,677	1889	5.3	1,522.8	3,122
1885	84.1	12,745.4	61,524	1890	4.0	678.4	4,432
1886	39.8	20,544.5	7,413	1895	3.8	309.5	1,721
1887	2.5	459.2	1,665				
1888	2.4	520.88	2,884		170.9	41,239.5	108,438

Anderson, et al (1950, p. 58) noted: "The mine is owned by Mrs. Alice Moser of Huntington Park, California. It was last worked in 1930 when the lower east tunnel was extended; however, no ore was found and operations soon ceased."

Exploration for a continuance of the Quaker City mineralized zone was conducted on the nearby Jo Orla Prospects. No records of production were found for this prospect. This property was developed on an unpatented claim which is currently administered by the BLM.

Geology

Geological relationships and structural components are illustrated in Figure 2.

The Quaker City is described by Umpleby and others (1930, p. 188) as follows: *"The ore occurred in poorly defined lenses in a westward-dipping zone of crushed carbonaceous slate. The zone is developed by six principal tunnels, but most of the ore was found in the third level above the creek. Southward across the creek the zone continues in the Amicus deposit, but here a large amount of work has yielded very little ore".*

"The Jo Orla prospect consists of one short tunnel west of, and adjacent to, the Quaker City diggings. It is held by H.F. Cassidy and M.B. Oberchain, of Hailey, Idaho. The tunnel extends through highly contorted argillite of the Milligen Formation, and was evidently driven to intersect the western continuation of the Quaker City shear zone. It seems to have accomplished its purpose, for near the tunnel face a faulted zone was encountered which occupies the projected position of the Quaker City shear zone. An exploratory raise was started in the fault zone, but, other than exposing some iron-stained quartz and calcite stringers, it appears to have been unsuccessful. Fifty-eight feet from the portal, the tunnel cuts a small two-inch to six-inch quartz vein containing some lead-silver sulphides. The vein strikes due north, and dips 20º E. Some undercutting was done in the tunnel but the vein quickly pinched out and exploration ceased" (Anderson, et al, 1950, p. 58).

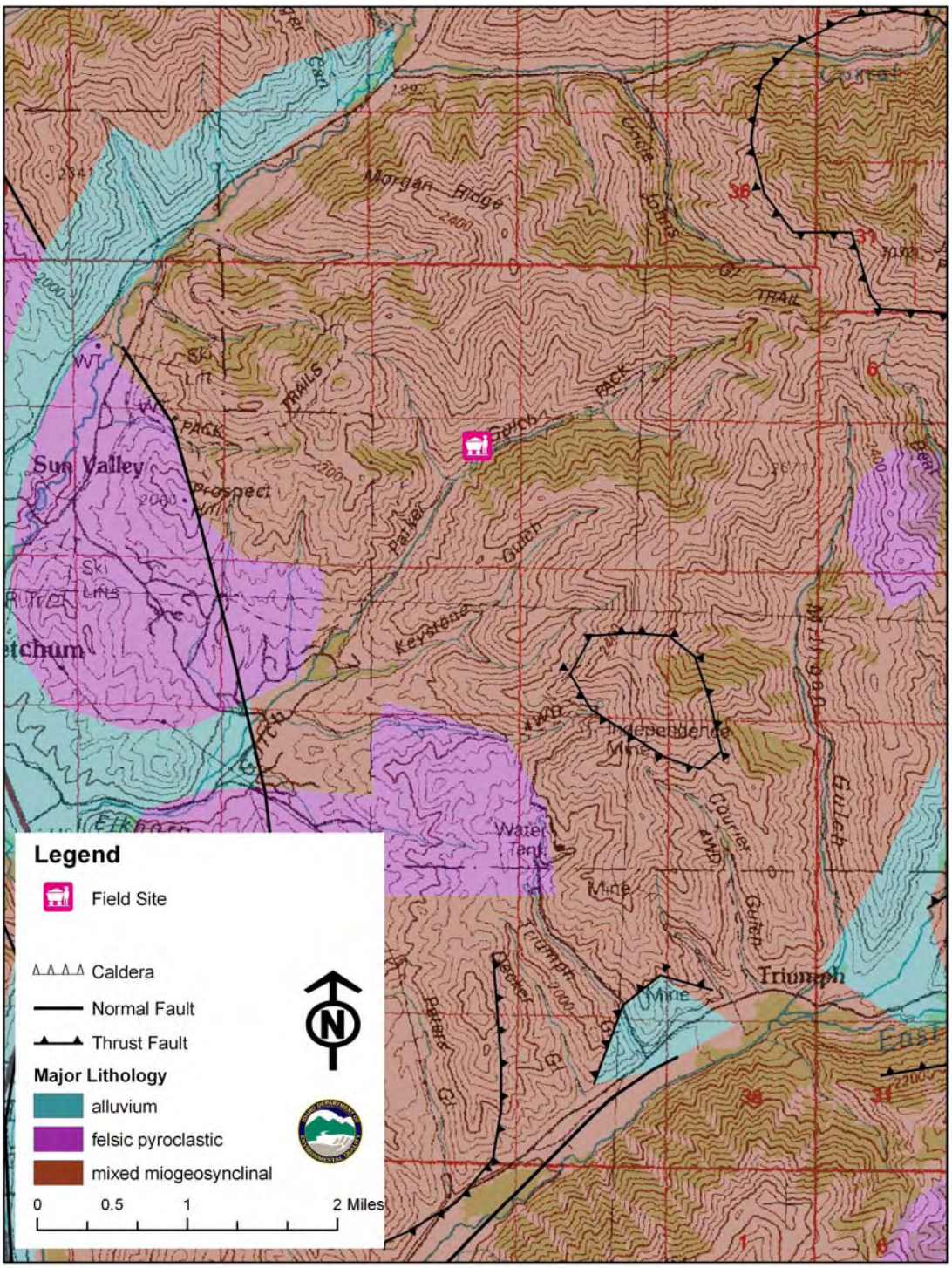

Figure 2. Generalized Geology near Quaker City Mine

SECTION FOUR

Current Site Conditions

The Quaker City Mine is situated within a minor ephemeral drain on the north side of Parker Gulch. The workings occupy the hillside, varying in elevation from approximately 6,350 to 6,750 feet amsl. Though historical accounts note that mining operations ceased in 1930, some later construction activities have occurred near the lower workings and waste dumps. Trees have been planted in this area, possibly to stabilize the waste material. Additionally, a small pond has been constructed along the south side of the Parker Gulch Road to handle local irrigation needs. The pond is surrounded by riparian and wetlands vegetation and measures less than 50 feet in diameter.

SECTION FIVE

Current and Potential Future Uses

The site is on private property, but the lands to the north and west are public and currently used for recreation (bike riding, hiking and hunting). The road access is shared with residential property owners, the closest of which resides on the former Amicus claim directly opposite the site.

The old mine road appears to have been reworked and partial reclamation of the lower mine waste dumps is evident. Trees have been planted to help stabilize this material. A small pond was created along the south side of Parker Gulch Road below the lowest waste dump, either collecting water from mine seepage or from an adjacent spring. The vegetation appears to be unaffected by its close proximity to mine wastes.

SECTION SIX

Sources

The Quaker City Mine's workings are predominantly aligned along a shear zone, as evidenced by a succession of very small (<100 cubic yards) to small (< 250 cubic yards) waste dumps on the hillside. Near the intersection of the old road, an inclined shaft and an adit appear to represent the primary workings of the mine, probably as the "3rd level", noted in Anderson (1950, p. 58). These lower waste dumps appear small as well, though subsequent construction activities may have altered their original [volumes] footprint on the hillside (?).

Sample QC-SS-1 was collected from the waste dump, located adjacent to the inclined shaft. The soils sample consisted of dark brown soil that was 100% minus 1 ½ inch rock and greater than 50% passed a 10 mesh sieve. There is also less than 10% organic material in the sample.

Sample Analysis

Soil sample QC-SS-1 contained concentrations of total arsenic, total cadmium, total lead, total mercury, and total silver which exceed Idaho's *Initial Default Target Levels* (IDTLs). The IDTLs are conservative risk-based target levels developed by IDEQ using a target risk of 10^{-6} and a *Hazard Quotient* of 1. An exceedence of the IDTLs indicates that additional site assessment work may be necessary if pathways are complete and receptors are subject to chronic exposure to contaminants from the site. An exceedence of the IDTLs may also be indicative of risks that may evolve if the site conditions change, such as development for residential uses.

Soil sample QC-SS-1 also contained concentrations of arsenic and lead that exceed the Residential Screening Levels (RSLs) for soils. If RSLs are exceeded near residential receptors or on a community roadway, removal and/or other remedial action would be necessary.

Based upon the sample results, if the site is to be developed as a residential development, additional site characterization should be conducted and risk management should be incorporated in development plans. Sample analysis results are detailed in Table 2.

Table 2

Quaker City Mine

Description	IDTLs	EPA Region 6 HHSVs	Inclined Shaft Waste Dump QC-SS-1
	mg/kg	mg/kg	mg/kg
Aluminum			
Antimony	4.77	31	
Arsenic	0.391	23	**177**
Barium	896	1600	77.3
Beryllium	1.63	160	
Cadmium	1.35	39	**16.1**
Calcium			
Chromium	7.9	210	7.62
Cobalt		900	
Copper	921	2900	137
Iron		55000	
Lead	49.6	400	**2050**
Magnesium			
Manganese	223	3600	
Mercury	0.00509	23	**0.297**
Nickel	59.1	1600	
Potassium			
Selenium	2.03	390	21
Silver	0.189	390	**40.8**
Vanadium		390	
Zinc	886	23	573

SECTION SEVEN

Pathways and Receptors

No current precipitation data is available for the Quaker City. Therefore, precipitation data, maintained from 1948 through 1972, was used from a recording station located approximately 1mile south from Sun Valley at an elevation of 5,980 feet amsl. The mean annual precipitation is 17.26 inches, and the 100-year, 24-hour event is 2.16 inches (WRCC, 2007).

There are not any residences, schools or day-care facilities within 200 feet. The nearest residence is located approximately 500 feet to the east across Parker Gulch Road. Additional residences are located along this road (year-round and/or vacation properties), downstream approximately 1 miles, towards Sun Valley.

Air

Concentrations of metals in wind borne fugitive dust have been the driving force behind cleanups in the former mining properties of the Wood River area, particularly at the Triumph Mine Site and Minnie Moore tailings Impoundment. However, the Quaker City's waste dumps are fairly well vegetated and moderately consolidated. Consequently, the likelihood of aerial dispersion of particulates is expected to be minor.

Groundwater

During the cleanup activities of the nearby Triumph mine, the first concerns were related to potential human health risks as a result of contamination of public and private drinking water supplies. Generally speaking, contamination of drinking water systems was thought likely to occur from two types of sources (ore bodies and waste dumps) and along three pathways, as illustrated by the following three scenarios. First, heavy metals are leached from mine waste dumps, enter ephemeral or perennial drains and then contaminate the area's shallow ground water system. Second, heavy metals leach from the local ore bodies and are transported through the geologic structure to the shallow ground water. Third, heavy metals could leach out of the ore bodies, and be discharged from the underground workings as adit water, that is then conveyed through ephemeral and perennial drains to the shallow ground water systems.

For the purposes of completing Preliminary Assessments, Source Water Assessments (completed for local public drinking water supplies) were used to identify any known affects to those systems. Although IDEQ's Source Water Assessments were used to evaluate potential affects of this mine on public drinking water supplies no inferences can be made about the affects that this and adjoining mines have on local private wells.

Source water assessments provide information on the potential contaminant threats to public drinking water sources. In the Big Wood River Valley Idaho, most of those sources (>95%) are ground water (IDEQ 2000). Each source water assessment:

- Defines the zone of contribution, which is that portion of the watershed or subsurface area contributing water to the well or surface water intake (**source area delineation**)

- Identifies the significant potential sources of drinking water contamination in those areas (**contaminant source inventory**)

- Determines the likelihood that the water supply will become contaminated (**susceptibility analysis**)

Each assessment is summarized in a report that describes the above information and provides maps of the location of the public water system, the source area delineation, and the locations of potential contaminant sources. Idaho began developing source water assessments in 1999, and in May 2003 met its obligation under the amendments of the Safe Drinking Water Act by completing delineations for all 2100+ public water systems that were active in Idaho as of August 1999 (IDEQ 2000). Source water assessments for new public drinking water systems are being developed as those systems come online. Each public water system is provided with two copies of its final assessment report. Four source water assessments for drinking water supplies have been used in this Preliminary Assessment Process to evaluate the potential impacts to both public and private drinking water supplies in and around Sun Valley, Ketchum, Hailey and Bellevue.

The information extrapolated from these reports is based on data that existed at the time of their writing, and the professional judgment of IDEQ staff. Although reasonable efforts were made to present accurate information, no guarantees, including expressed or implied warranties of any kind are made with respect to these reports or this Preliminary Assessment by the State of Idaho or any of its agents who also assume no legal responsibility for accuracy of presentation, comments or other information in these publications or this Preliminary Assessment report. The results should not be used as an absolute measure of risk, and they should not be used to undermine public confidence in public drinking water systems.

The Source Area delineation process establishes the physical area around a well or surface water intake that becomes the focal point of the source water assessment. The process includes mapping the boundaries of the zone of contribution the area contributing water to the well or to the surface water intake) into time of travel zones (TOT) indicating the number of years necessary for a particle of water to reach a well or surface water intake (IDEQ 2000). The size and shape of the source water assessment area depend on the delineation method used, local hydrogeology, and volume of water pumped from the well or surface water intake.

IDEQ used a refined computer model approved by EPA to determine the 3-year (Zone 1B), 6-year (Zone 2), and 10 year (Zone 3) time of travel associated with the Big Wood River Aquifer and its sources (IDEQ 2000).

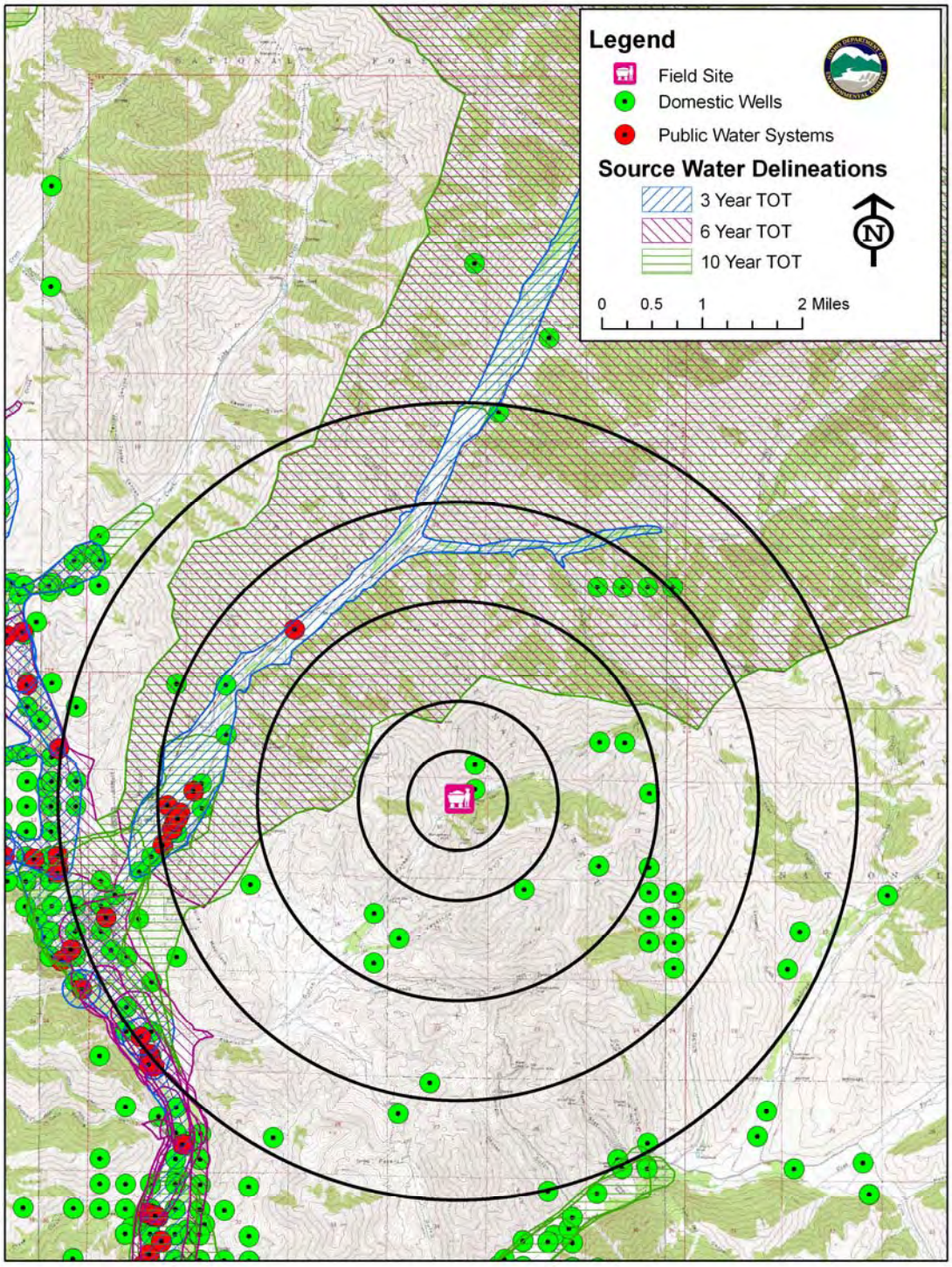

Figure 3

This process involves collecting, recording, and mapping existing data and geographical information system (GIS) coverage to determine potential contaminant sources (e.g., gas stations) within the delineated source water assessment area. The potential contaminant source inventory is one of three factors used in the susceptibility analysis to evaluate the

overall potential risk to the drinking water supply (IDEQ 2000). The inventory process goal is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water or surface water contamination.

This susceptibility analytical process determines the susceptibility of each public water system well or surface water intake to potential contamination within the delineated source water assessment area. It considers hydrogeologic characteristics, land use characteristics, potentially significant contaminant sources, and the physical integrity of the well or surface water intake. The outcome of the process is a relative ranking into one of three susceptibility categories: high, moderate, and low. The rankings can be used to set priorities for drinking water protection efforts (IDEQ 2000).

There are numerous public and private drinking water supplies in the Big Wood River Basin. The Sun Valley Water and Sewer District operates and maintains nine wells in two groupings (IDEQ 2000). The City of Ketchum drinking water system consists of seven wells in two groupings. The City of Hailey's drinking water system consists of six wells and a spring (IDEQ 2000).The City of Bellevue drinking water system consists of two wells and three springs (IDEQ 2000).

Generally speaking, public drinking waters systems in the Big Wood River Valley are rated as moderate to high (IDEQ 2000). Multiple factors affect the likelihood of movement of contaminants from the sources to the aquifer, which lead to this moderate to high score. Soils in the area are poorly to moderately drained. The vadose zone is predominantly gravel, which increases the score. On the valley floors the average depth to ground water is twenty to fifty feet.

To date, routine water quality monitoring of public drinking water indicates that there are no significant volumes of heavy metals migrating through the regional or localized ground water systems. More specifically, there are not any long-term or recurring water chemistry problems in the Sun Valley Water and Sewer District drinking water sources. One well in the Sun Valley system has had one instance (August 1991) when cadmium exceeded the MCLs (IDEQ 2000). There is no current, long term or recurring water chemistry problems in the City of Ketchum's drinking water sources. Arsenic, nickel, antimony, barium, selenium, chromium, cyanide and nitrate have been detected in Ketchum's wells, but all were well below MCLs (IDEQ 2000). There is no long term or recurring water chemistry problems in the City of Hailey's drinking water sources. Manganese, Zinc, chromium, and mercury have been detected in Hailey's wells, but all were well below MCLs (IDEQ 2001). Currently, there are no data that indicate that any metal concentrations have exceeded MCLs in the Bellevue drinking water systems (IDEQ 2000).

Surface Water

The Quaker City lies in an ephemeral drain that intersects with Parker Gulch, a perennial stream. None of the open or collapsed mine workings showed evidence of drainage. However, a seep or spring emanates near the base of the workings and apparently is

captured by the adjacent pond. Due to the uncertainty of ownership, the pond was not sampled. However, there were not any indications of significant erosion of the Quaker City mine waste dumps, nor are there any indications that any of the sediment generated has entered surface waters. There are no apparent adverse affects to surface water users.

There are no drinking water intakes within the 15-mile Total Distance Limit (TDL). The following TDL in-water segment was calculated from the lowest elevation workings on the Quaker City (see Figure 4).

Parker Gulch lies approximately 0.1 miles south of the site. Flowing westward, it is enjoined by Keystone Gulch at 1.75 miles and Independence Gulch at 2.0 miles. Here, the surface water is renamed “Elkhorn Gulch”. Several unnamed tributaries enjoin Elkhorn Gulch which is diverted at 3.5 miles to residential properties to support local irrigation and recreation needs. The Big Wood River continues to the south for the remainder of the 15-mile TDL.

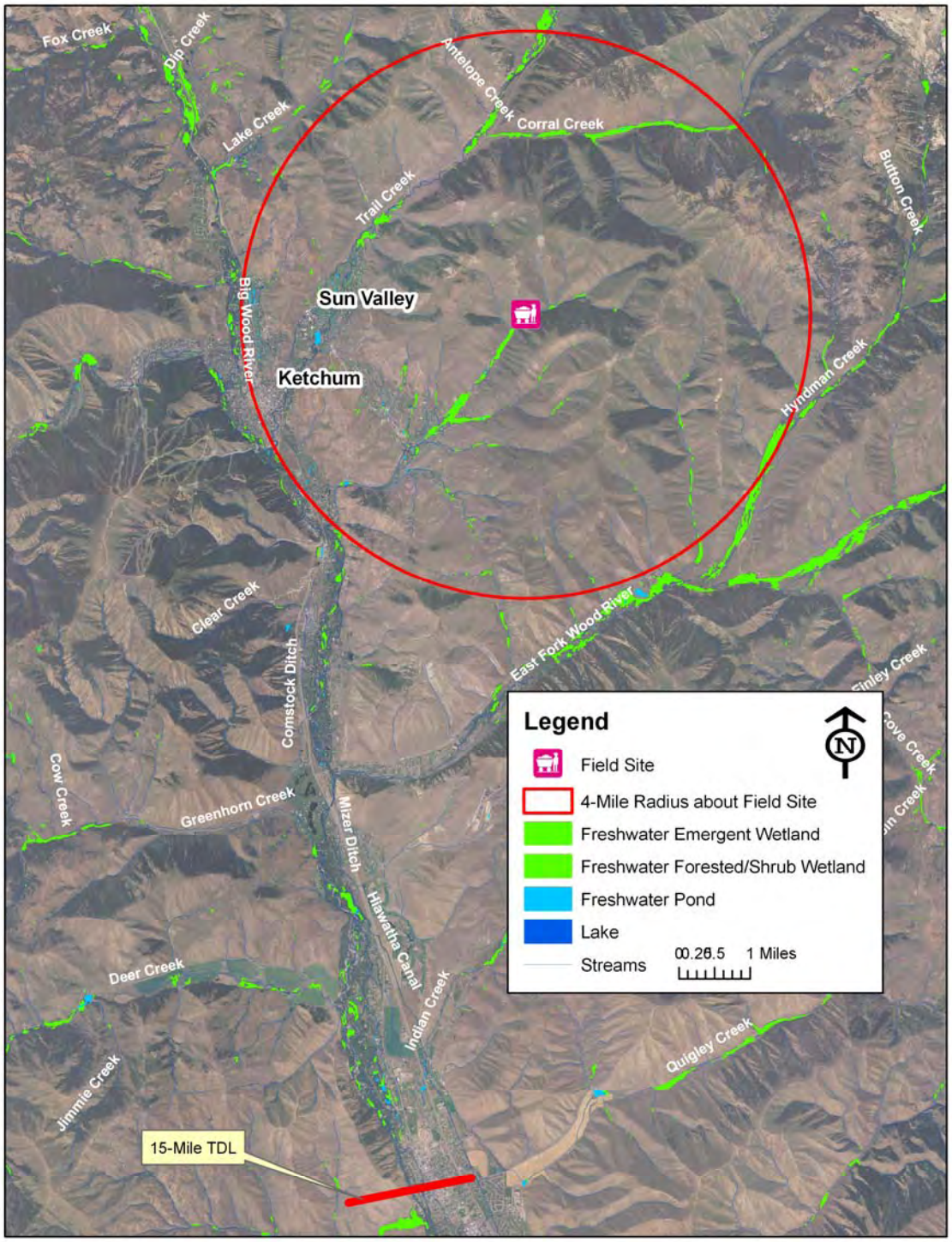

Figure 4

Sensitive Species and Wetlands

The national wetland data base indicates that wetlands exist along Parker Gulch below the Quaker City Mine (see Figure 5). The pond area and tree stands, near the lower

workings, do not appear to have suffered any phytotoxic affects. Although disturbances may have occurred during residential developments elsewhere within Parker Gulch, adverse effects were not apparent at the Quaker City.

The site is within the potential wolf range. Since wolves range over a wide area, exposure to heavy metals at the site and potentially within the adjacent stream/pond may be limited, thus minimizing any dose. Therefore, it does not appear as though the site could cause adverse affects in this sensitive species.

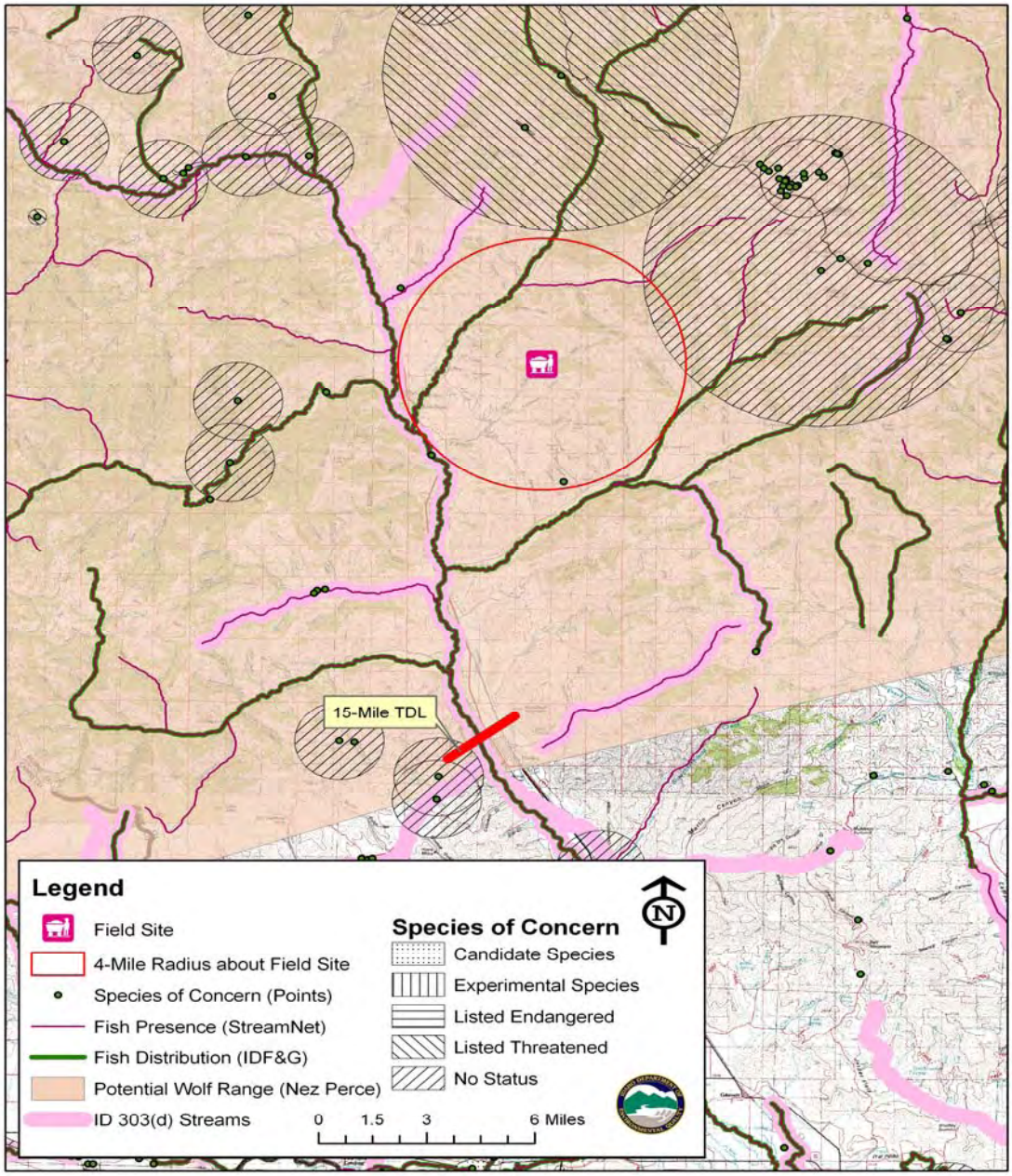

Figure 5

Conclusions and Recommendations

Based on existing conditions and uses, historic information and mine waste sample analysis, the IDEQ has determined that No Remedial Action is Planned (NRAP) for this property. Although IDEQ's Source Water Assessments were used to evaluate potential affects of this mine on public drinking water supplies no inferences can be made about the affects that this and adjoining mines have on local private wells. Furthermore, based on the historical information regarding mine development and production, and sample analysis, IDEQ recommends if you develop the mine site, particularly for residential purposes, you complete a more thorough site characterization and include risk management provisions in development plans.

The Quaker City claim has at least eight adits and one inclined shaft. The inclined shaft is open to a depth of at least six feet. The adjacent adit is partially open as well. Both of these workings warrant closure to minimize safety hazards. If constructions of homes or other buildings do occur above mine workings, unstable ground conditions or subsidence may be experienced.

References

Anderson, A.L., Kiislgaard, T.H., and Fryklund, V.C., Jr., 1950, *Detailed geology of certain areas in the Mineral Hill and Warms Springs mining districts, Blaine County, Idaho;* Idaho Bureau of Mines and Geology, Pamphlet No. 90, 37 p.

Bureau of Land Management, 2006, *Land Patent Details* – BLM GLO Records. http://www.glorecords.blm.gov/PatentSearch/Detail.asp?Accession=IDIDAA+046037&Index=1&QryID=41620.75&DetailTab=1

Environmental Protection Agency (EPA), 2007. http://www.epa.gov/Region6/6pd/rcra_c/pd-n/screen.htm

Idaho Department of Environmental Quality. 2000. Sun Valley Water and Sewer District (PWS 5070051) Source Water Assessment Final Report.

Idaho Department of Environmental Quality. 2000. City of Hailey (PWS 5070022) Source Water Assessment Final Report.

Idaho Department of Environmental Quality. 2001. City of Ketchum (PWS 5070028) Source Water Assessment Final Report.

Idaho Department of Environmental Quality. 2000. City of Bellevue (PWS 5070004) Source Water Assessment Final Report.

Umpleby, J.B., Westgate, L.G., and Ross, C.P., 1930, *Geology and ore deposits of the Wood River region, Idaho, with a description of the Minnie Moore and nearby mines by Hewett,* USGS Bulletin 814, 250 p.

Western Regional Climate Center (WRCC), 2007. http://www.wrcc.dri.edu/cgi-bin/cliGCStP.pl?id8906

ABBREVIATED PRELIMINARY ASSESSMENT CHECKLIST

This checklist can be used to help the site investigator determine if an Abbreviated Preliminary Assessment (APA) is warranted. This checklist should document the rationale for the decision on whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer: Brian Gaber, Environmental Compliance Officer (Name/Title) 11/16/07 (Date)
Idaho DEQ, 1410 N Hilton, Boise (Address) 208-373-0566 (Phone)
Brian.gaber@deq.idaho.gov (E-Mail Address)

Site Name: QUAKER CITY patented mine claim

Previous Names (if any): Quaker City Mine

Site Location: 921 Parker Gulch Road
(Street)
Sun Valley _____ , Idaho _____ -
(City) (ST) (Zip)

Latitude: 43º 41' 52.90"N **Longitude:** 114º 17' 34.26"W

Describe the release (or potential release) and its probable nature: the site was investigated for the potential release of heavy metals & sediment from mine waste dumps

Part 1 - Superfund Eligibility Evaluation

If all answers are "no" go on to Part 2, otherwise proceed to Part 3.	**YES**	**NO**
1. Is the site currently in CERCLIS or an "alias" of another site?		**X**
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?		**X**
3. Are the hazardous substances potentially released at 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)?		**X**
4. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?		**X**
5. Is there sufficient documentation to demonstrate that no potential for a release that could cause adverse environmental or human health impacts exists (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)?	**X**	

Please explain all "yes" answer(s).
Site visit and sampling of waste dumps confirmed that contaminants of concern do not

exist in concentrations or available quantities to represent a threat to human health or the environment

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.	**YES**	**NO**
1. Does the site have a release or a potential to release?		**X**
2. Does the site have uncontained sources containing CERCLA eligible substances?		**X**
3. Does the site have documented on-site, adjacent, or nearby targets?	**X**	

If the answers to questions 1, 2, and 3 above were all "yes" then answer the questions below before proceeding to Part 3.	**YES**	**NO**
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 1 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: nearest residence located at 1000 Parker Gulch Road, approximately 500 feet east and up-gradient of mine site

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. You will 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 judgement when evaluating a site. Your judgement may be different from the general recommendations for a site given below.

Suspected/Documented Site Conditions		APA	Full PA	PA/SI	SI
1. There are no releases or potential to release.		**Yes**	No	No	No
2. No uncontained sources with CERCLA-eligible substances are present on site.		**Yes**	No	No	No
3. There are no on-site, adjacent, or nearby targets.		Yes	**No**	No	No
4. There is documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site.	Option 1: APA SI	Yes	No	No	Yes
	Option 2: PA/SI	**No**	No	Yes	NA
5. 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	Yes	No	No	Yes
	Option 2: PA/SI	**No**	No	Yes	NA
6. 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 1 mile of the site and have a relatively high likelihood of exposure to a hazardous substance migration from the site.		**No**	Yes	No	No
7. There is 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.		**No**	Yes	No	No

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 "NFRAP" 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:

	NFRAP		Refer to Removal Program - further site assessment needed
	Higher Priority SI		Refer to Removal Program - NFRAP
	Lower Priority SI		Site is being addressed as part of another CERCLIS site
	Defer to RCRA Subtitle C		Other: _____
	Defer to NRC		

Regional EPA Reviewer: _____ _____

Print Name/Signature Date

PLEASE EXPLAIN THE RATIONALE FOR YOUR DECISION:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

NOTES: