

APPENDIX A

**COMMENT LETTERS ON DRAFT EIS
WITH SUBSTANTIVE COMMENTS**

340 Bottle Creek Road
Winnemucca NV
89445[Click here and type return address]

.....
Mel Hummel Ranch

February 5, 2012

5100 E. Winnemucca Blvd.
Winnemucca, NV. 89445

Dear Kathleen:

I am writing in regards to the Hycroft Mine Expansion Project. I am excited and happy for Hycroft to be able to expand and give more life to their mine. My concern is the road getting out to the mine site. My Ranch is located on Bottle Creek Road and I travel Jungo Road a lot. The road gets so much traffic that it can be dramatically different in a day's time, and not in a good way. I am aware that Hycroft Mine is continuously working on the road to keep it accessible. However there is so much traffic it is almost impossible to keep up. [Would it be feasible to work jointly with Humboldt County, and the Geo-Thermal plant to cost share on getting Jungo Road paved.]

[Another concern I have is the speed limit not being enforced.]The busses transporting workers to the mine are very courteous and respectful. The folks driving their personal and individual mine vehicles are not. They drive way to fast for the conditions of the road and I'm afraid someone may get seriously hurt or worse if they don't slow down. Also it is open range land and many cattle have died due to driver inattention or excessive speeds.

Again I am happy Mycroft Mine is doing so well and expanding just not thrilled about the road.

Sincerely,



Mel Hummel
Owner

RECEIVED BLN
WINNEMUCCA NV
2012 FEB -7 PM 2:14

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Moritz, Gerald L

From: BLM_NV_WDO_Webmail
Sent: Friday, March 09, 2012 9:24 AM
To: Rehberg, Kathleen L; Moritz, Gerald L
Subject: FW: State Agency Comments E2012-114 DEIS for the Hycroft Mine Expansion
Attachments: E2012-114 NDWR DEIS for the Hycroft Mine Expansion[1].pdf; E2012-114 NDWR.pdf; E2012-114 SHPO.pdf; E2012-114 NDOT.pdf

From: Skip Canfield [mailto:scanfield@lands.nv.gov]
Sent: Thursday, March 08, 2012 2:16 PM
To: BLM_NV_WDO_Webmail; Rehberg, Kathleen L
Cc: scanfield@lands.nv.gov
Subject: State Agency Comments E2012-114 DEIS for the Hycroft Mine Expansion

Kathleen:

The Nevada State Clearinghouse provides the attached comments and the comments below regarding the DEIS for the Hycroft Mine Expansion project.

Skip Canfield
Nevada State Clearinghouse
State Land Use Planning Agency

Nevada Division of State Lands
Department of Conservation and Natural Resources
901 South Stewart Street, Suite 5003
Carson City, NV 89701
775-684-2723
<http://clearinghouse.nv.gov>
www.lands.nv.gov

The Nevada Division of State Lands and the State Land Use Planning Agency offer the following comments:

[Multiple use activities on Nevada's public lands are supported and encouraged. There are continuing 1 concerns about the cumulative visual impacts to public lands users' experiences from certain activities (temporary and permanent). Some notable activities include proliferation of new roads, poorly-sited and designed structures, lack of co-location of infrastructure and improper lighting, to name a few.

Cumulative visual impacts to public lands users' experiences should be considered.]

[The following language is suggested that should be provided up front to applicants who propose development 2 on public lands that includes lighting:

Utilize appropriate lighting:

- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.

- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas.
- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.
- Any required FAA lighting is exempt from this condition, but should be consolidated and minimized wherever possible.]

2
cont.

[In addition, the following mitigation measures should be employed.

3

Utilize building materials, colors and site placement that are compatible with the natural environment:

- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.
- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.
- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.]

Skip Canfield
State Land Use Planning Agency

Skip Canfield

From: Rebecca Palmer
Sent: Monday, March 05, 2012 9:14 AM
To: Skip Canfield
Subject: RE: Nevada State Clearinghouse Notice E2012-114

Here are our comments:

The SHPO has reviewed the subject document and recommends that the National Historic Trails Office in Salt Lake City, Utah be consulted concerning the affect of the project on National Historic Trails. The SHPO looks forward to receiving the required Memorandum of Agreement prior to the Bureau of Land Management's signing of the ROD. Thanks again for the opportunity to comment on this document.

Rebecca Lynn Palmer
Deputy Historic Preservation Officer
901 South Stewart Street, Suite 5004
Carson City NV 89701
Phone (775) 684-3443
Fax (775) 684-3442

Please note, my email is rlpalmer@shpo.nv.gov

From: scanfield@lands.nv.gov [mailto:scanfield@lands.nv.gov]
Sent: Monday, January 30, 2012 9:50 AM
To: Alan Coyner; Alan Jenne; Alisanne Maffei; Nevada State Clearinghouse; clytle@lincolnnv.com; cstevenson@ndow.org; Brad Hardenbrook; Doug Driesner; David Catalano; ddavis@unr.edu; dmouat@dri.edu; ed.rybold@navy.mil; James Morefield; jhardcas@unr.edu; Jennifer Newmark; Jennifer Scanland; munteanj@unr.edu; John Walker; jprice@unr.edu; Karen Beckley; kirk.bausman@us.army.mil; cohn1@nv.doe.gov; Lowell Price; Mark Freese; Mark Harris; mstewart@lcb.state.nv.us; Mike Dondero; deborah.macneill@nellis.af.mil; escomm2@citlink.net; Octavious.Hill@nellis.af.mil; Pete Anderson; Pete Konesky; Rebecca Palmer; Rich Harvey; Robert K. Martinez; Russ Land; Sandy Quilici; Sherry Rupert; Skip Canfield; Steven Siegel; sscholley@lcb.state.nv.us; tcompton@dot.state.nv.us; Terry Rubald; Richard Ewell; t mueller@dot.state.nv.us; Tod.oppenborn@nellis.af.mil; William.Cadwallader@nellis.af.mil; zip.upham@navy.mil; Tim Rubald; Alex Lanza; Dave Marlow; Kevin J. Hill
Subject: Nevada State Clearinghouse Notice E2012-114



NEVADA STATE CLEARINGHOUSE

Department of Conservation and Natural Resources, Division of State Lands
901 S. Stewart St., Ste. 5003, Carson City, Nevada 89701-5246
(775) 684-2723 Fax (775) 684-2721

TRANSMISSION DATE: 01/30/2012

U.S. Bureau of Land Management

Nevada State Clearinghouse Notice E2012-114

Project: DEIS for the Hycroft Mine Expansion

Skip Canfield

From: Alex Lanza
Sent: Tuesday, January 31, 2012 2:34 PM
To: Skip Canfield
Cc: Cliff Lawson
Subject: RE: Nevada State Clearinghouse Notice E2012-114

Good afternoon Skip;

The Nevada Division of Environmental Protection (NDEP) - Bureau of Water Pollution Control (BWPC) - does not have any comments regarding Notice for SAI: **E2012-114 - Hycroft Mine Expansion Project, Nevada.**

Please note that the entity that manages this **Hycroft Mine Expansion Project** may be subject to BWPC permitting.

Thank you for the information and the opportunity to comment.

If you have any questions, please contact me at (775) 687-9468.

Respectfully,

Alexi Lanza

Alexi Lanza, P.E.
Permits Branch - Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Ste 4001
Carson City NV 89701
Phone: 775.687.9468 - Fax: 775.687.4684
www.ndep.nv.gov

Please visit BWPC's main website: <http://ndep.nv.gov/bwpc/index.htm>

NEVADA STATE CLEARINGHOUSE
Department of Administration, Budget and Planning Division
209 East Musser Street, Room 200, Carson City, Nevada 89701-4298
(775) 684-0209 Fax (775) 684-0260
DATE: March 20, 2007

Division of Water Resources

2/6/2012

Nevada SAI # E2012-114
Project: DEIS for the Hycroft Mine Expansion

No comment on this project Proposal supported as written

AGENCY COMMENTS:

A review of the area, Hydrographic Basin #028, Black Rock Desert, Black Rock Desert Region and indicates there are 20 active water rights in the vicinity of the described lands in this proposed project all of which are underground rights.

Please be advised that wells and/or points of diverting water on these lands, whether new or existing, shall require prior approval from the Nevada Division of Water Resources. All waters of the State belong to the public and may be appropriated for beneficial use pursuant to the provisions of Chapters 533 and 534 of the Nevada Revised Statutes (NRS), and not otherwise, including those used for geothermal projects.

Any water or monitor wells, or boreholes that may be located on either acquired or transferred lands are the ultimate responsibility of the owner of the property at the time of the transfer and must be plugged and abandoned as required in Chapter 534 of the Nevada Administrative Code. If artesian water is encountered in any well or borehole it shall be controlled as required in NRS § 534.060(3).

Any water used on the described project for construction, dust control, or maintenance should be provided by an established utility or under permit or waiver issued by the State Engineer's Office. If artesian water is located in any well or borehole it shall be controlled as required in NRS 534.060(3).

Dewatering for alleviation of hazards caused by the rise of ground water from secondary recharge is provided by the provisions of NRS 534.025 and NRS 534.050(2).

Sincerely,

Steve Shell
Water Resources Specialist

SLS/dl

From: BLM_NV_WDO_Webmail
Sent: Wednesday, March 14, 2012 11:31 AM
To: Rehberg, Kathleen L; Moritz, Gerald L
Subject: FW: Hycroft Mine Expansion Project (Rehberg)
Attachments: Hycroft_DEIS_comments.docx

From: Dave Cooper [mailto:dccooper7@gmail.com]
Sent: Monday, March 12, 2012 4:45 PM
To: BLM_NV_WDO_Webmail
Subject: Hycroft Mine Expansion Project (Rehberg)

Attached are my comments on the Hycroft mine expansion project. Dave Cooper

March 12, 2012

Dave Cooper
PO Box 147
Gerlach NV 89412

Kathleen Rehberg
BLM, Black Rock Field Office
5100 East Winnemucca Blvd
Winnemucca NV 89445

Please accept the following comments on the Draft EIS for the Hycroft Mine Expansion Project:

Visual Resources:

While an attempt was made to assess the impacts of the mine on the visual resources and night skies it falls short of portraying the true impacts of the visual impacts of the mine on the surrounding landscape.

The contrasting colors of the mine are visible from parts of the Jackson Mountain Wilderness, the Black Rock Desert Wilderness, as well as the Black Rock NCA and portions of the historic emigrant trails. One of the main purposes of the NCA designation was to protect and preserve the untouched landscapes surrounding the emigrant trails. The NCA contains the most natural conditions and well preserved landscapes than anywhere else on the entire historic California trail system.

[There should have been at least 2 more observation points (KOP) that better represents the vantage points of recreational users in the Black Rock NCA, Wilderness areas and especially along the Emigrant trail from which to analyze the visual impacts. One KOP located along the emigrant trail between Black Rock Point and the rail road and another in the Black Rock Playa west of Black Rock Point. These are areas frequented by visitors to the Black Rock. Touring along the historic trail is a popular activity that takes place throughout the summer and fall. The mine is in full view along the trail route south of Black Rock Point to a point south of the railroad as well as over to Sulphur where the ingress egress route to the trail is located. Camping, land sailing, rocket launches, astronomy and other activities occur on the deep Black Rock Playa.] 1

[One of the main reasons people seek out recreation adventures in the Black Rock NCA and wilderness areas is the solitude that this region offers. The vast open spaces and lack of any development or alteration to the landscape gives a visitor the sense of remoteness and being alone. That experience can be disrupted or impacted by development or large alterations to the surrounding landscape.] 2

Dark Skies:

[The EIS focused on the visible light from the mine site while at Burning Man. The issue is not what affect there is or occurs during the one week of the Burning Man event, the issue is the visible light emitted from the mine site that impacts the visitors and recreational users and the region through the rest of the 3

year. Outside of Burning Man there are hundreds of other visitors to the Black Rock that come here for the remoteness and solitude that is part of the experience many of these people seek.

Lights from the Hycroft mine are the only lights visible from many areas within the Black Rock NCA, South Jackson Mountain Wilderness, Black Rock Desert Wilderness, Black Rock Desert Playa, and some 25 to 30 miles away in the Calico Mountain Wilderness as well as the Granite Mountains. Thousands of people visit the NCA and wilderness areas each year to experience solitude or just immerse themselves into the vast open landscapes of the Black Rock. Many come to the playa to view the night skies and engage in astronomy. The lack of light pollution in the Black Rock is a major reason that this area is a great place for star gazing. The lights from the Hycroft mine are very visible from the deep playa where many go to camp and engage in a number of other activities and events each years such as rocket launching and land sailing. Visitors to the area have been confused at night thinking the Hycroft mine lights were the town of Gerlach. Once in the deep playa the only lights that are visible at night are at the Hycroft mine.

The real impact is to the visitors to the Black Rock NCA and visitors that tour the historic Applegate Lassen trail as well as visitors to the adjacent wilderness areas. They come to seek solitude in this remote region and that sense of remoteness and solitude is adversely impacted by outside sights coming from the contrasting colors of the mine tailings and most especially from the lights emitted at night in an otherwise natural and primitive landscape.

Implementing a lighting plan to lessen the impact of lights in this remote region of the Black Rock will help but will not completely eliminate the impacts to visitor experiences over the 20 year life of the mine.]

Dave Cooper



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

MAR 26 2012

Kathleen Rehberg
Bureau of Land Management
Winnemucca District Office
5100 E. Winnemucca Blvd.
Winnemucca, Nevada 89445

Subject: Draft Environmental Impact Statement for the Hycroft Mine Expansion Project, Humboldt and Pershing Counties, Nevada [CEQ# 20120016]

Dear Ms. Rehberg,

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the Hycroft Mine Expansion Project. Our review and comments are provided pursuant to the National Environmental Policy Act, the Council on Environmental Quality Regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. We appreciate BLM's willingness to provide us with additional time to complete our review.

The Proposed Action would include the expansion of mining and mineral exploration activities at the existing Hycroft Mine, increasing the Project area from 8,858 to 14,753 acres of private and public land, and adding approximately 2,172 acres of new surface disturbance. The expansion would increase the mine life by an additional 12 years. On June 30, 2011, EPA provided extensive scoping comments for the Project which included detailed recommendations on water resources, air quality, mining waste management and reclamation

We have rated the DEIS as *Environmental Concerns – Insufficient Information* (EC-2). Please see enclosed “*Summary of EPA Rating Definitions.*” An “EC” signifies that EPA’s review of the DEIS has identified environmental impacts that should be avoided in order to provide adequate protection for the environment. A “2” rating signifies that the DEIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment.

In the enclosed detailed comments, we have identified issues of concern along with specific recommendations for your consideration. In particular, EPA is concerned about potential impacts on water resources. [The DEIS does not provide sufficiently detailed information on water usage, water quality, and groundwater availability. Inconsistencies within the document make it difficult to verify the accuracy of the information presented, particularly with respect to groundwater quality and water usage.] [We recommend that the water quality data be examined more closely by analyzing the geochemical patterns of the surface water, groundwater, and mine process waters.] [We also recommend that BLM consider measures to further minimize impacts to various resources and include additional information on air quality, cumulative impacts, and other topics, as described in our detailed comments.]

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EPA appreciates the opportunity to review this DEIS, and we are available to discuss these comments with you further. Please send one hard copy of the Final Environmental Impact Statement and two CD ROM copies to this office at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please contact me at 415-972-3521, or contact Ann McPherson, the lead reviewer for this project. Ann can be reached at 415-972-3545 or mcperson.ann@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen Martyn Goforth". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Kathleen Martyn Goforth, Manager
Environmental Review Office (CED-2)

Enclosures: EPA Summary of Rating Definitions
EPA Detailed Comments

Cc: Bruce Holmgren, Nevada Division of Environmental Protection

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Water Resources

Water Usage and Water Rights

4

The U.S. Environmental Protection Agency is concerned about water rights and water usage associated with the Hycroft Mine Expansion Project. The Draft Environmental Impact Statement presents conflicting information on water rights and limited information on water usage, particularly with respect to the Proposed Action. The Hycroft Mine is located within the Black Rock Desert Hydrographic Basin, which has a sustained yield of approximately 30,000 acre-feet per year (pgs. 3-55; 3-71). Water rights totaling 21,808 afy have been distributed within the basin by manner of use, with 4,515 afy allocated to mining and milling (pg. 3-71). The DEIS states, in Chapter 1, that Hycroft Resources and Development, Inc. holds water rights for approximately 1.6 billion gallons of annual consumption, or 4,910.2 afy (pg. 1-17). In Chapter 3, however, the DEIS states that HRDI's water rights include 2,910.83 afy within the basin (pg. 3-72).

The DEIS provides very limited information on water usage associated with the proposed project, except to note that current consumption is approximately 900 million gallons per year, or 2,762 afy (pg. 1-17). If this estimate is correct - and HRDI's water rights are, indeed, 2,910.83 afy - this would mean that only 148 afy of water would be available for the proposed expansion of the Hycroft Mine.

In the permit application¹ submitted to the State of Nevada, HRDI states that the existing Brimstone Heap currently uses approximately 1,800 gallons/minute (2,903 afy), and the total maximum make-up water application rate for the proposed North Brimstone Heap facility would be 4,100 gpm (6,612 afy), which includes 2,300 gpm (3,709 afy) for the expanded heap. The maximum make-up water application rate for the proposed South Heap facility will be 2,700 gpm (4,354 afy). Therefore, the total make-up water demand for the Hycroft Mine Expansion project is expected to be 6,800 gpm (10,967 afy). According to the application, existing flow rights total 2,897 afy. Based on these numbers, it would appear that HRDI would need an additional 8,070 afy for the expansion of the Proposed Project. If that is correct, then the water usage associated with the Proposed Project would surpass the 4,515 afy currently allocated to mining and milling within the Black Rock Desert Hydrographic Basin.

Recommendations:

The Final Environmental Impact Statement should:

- Describe the consumptive water use associated with the Hycroft Mine, including current operations and the proposed expansion of the Mine.
- Define the quantity of groundwater needed for the Proposed Action and the No Action Alternative.
- Describe the extent of HRDI's water rights, including whether HRDI holds water rights in multiple basins or strictly within the Black Rock Desert Hydrographic Basin.

¹ Application for Permit to Appropriate the Public Waters of the State of Nevada, Application No. 81409, December 23, 2011.

- Clarify whether the water usage associated with the Proposed Project will surpass mining and milling allocations within the Black Rock Desert Hydrographic Basin and, if so, what other sources would be used for the proposed Project. 4 cont.
- Revise the text to eliminate any inconsistencies in the numbers used to quantify water rights and water usage.]

[Water Quality

5

According to the DEIS, surface water in the vicinity of the Hycroft Mine is very limited and consists of ephemeral streams and two mapped springs west of the Project facilities, which have accumulated ponded water at the clay borrow source area (pg. 3-60). The two springs are sampled semi-annually and the clay borrow ponded area was sampled in 1991, 2005, and 2011. Elevated concentrations of arsenic, chloride, fluoride, sulfate and total dissolved solids are seen at these three locations (pg. 3-67; table 3.7-4). In addition, concentrations of aluminum, antimony, beryllium, iron, lead, manganese, mercury, and pH are also elevated.

Groundwater quality data were collected in 2010 and 2011. A summary is presented in Table 3.7-5 and includes minimum and maximum concentrations, as well as reference values (pg. 3-68). Elevated concentrations of several constituents, including those detected in surface water samples, were also detected in the groundwater samples. Elevated concentrations of some constituents can be indicative of natural processes, including basic geology and geothermal activity, or potential contamination from mining processes.

According to the DEIS, there appear to be multiple aquifers in the Project Area vicinity, with the surface water data representing the shallow perched aquifer system. The DEIS concludes that the perched aquifer system does not appear to be connected to the deeper groundwater system; however, the DEIS provides no basis for this conclusion and, in fact, notes that fault zones may serve as conduits for vertical groundwater flow between shallow, deep, and basement systems (pg. 3-62). Although it is reasonable to assume that the springs likely represent the shallow perched aquifer system, we are concerned, nonetheless, that there may be connections between the perched aquifer and the deeper groundwater system. Without further information on baseline/reference conditions and more detailed information on the surface and groundwater samples, it is not possible to ascertain whether the systems are interconnected, or the degree of connectivity, based on the information presented in the DEIS.

One way to determine if there are potential connections between surface and groundwater systems is to examine the geochemistry of the samples collected, particularly the composition of major ions. The geochemistry of groundwater is the result of interactions between groundwater, minerals, rocks and soils; however, human activity can alter water chemistry by contributing additional ions. Elevated levels of some ions may indicate anthropogenic inputs of contaminants, including industrial discharges. Major ion data are often examined graphically, using Piper or Stiff Diagrams, to determine if there is a geochemical pattern that can be associated with a particular site or sample. In many cases, a geochemical pattern, or fingerprint, can be identified that can be used to characterize groundwater, surface water, and leachate.

In February 1999, EPA published a report² on the characterization of mine leachates as part of an effort to develop a groundwater monitoring strategy for mine sites. EPA obtained water quality monitoring records from 22 heap leaching facilities in Nevada, including the Hycroft Mine, and four copper mines in Arizona. EPA determined that mine waste leachate has a distinct ionic composition that characterizes it at the source and can be used to differentiate it from adjacent surface water or groundwater. Geochemical monitoring results from the Hycroft Mine (1991 – 1993) show that the ionic composition of the barren pond is identical to that observed at the pregnant pond, providing a reliable signature for the mine process water. Furthermore, the ionic composition of the makeup water is distinguishable from that of the mine process water and that of the spring water nearby. The report notes that groundwater samples were not collected because it was considered unlikely that groundwater would be impacted from mining operations, due to the high rate of evaporation and the depth to groundwater (500 feet).

Recommendations:

Examine the ionic composition of the surface water samples and groundwater samples to verify that the ionic composition of the deeper groundwater is distinct from the ionic composition of the perched aquifer, as reflected by the spring box/surface water samples. Summarize this information in the FEIS.

Examine the major ion chemistry of the water samples at each of the monitoring wells and sampled sites to determine how groundwater varies spatially.

Determine the geochemical signature of the mine process water and makeup water and summarize this information in the FEIS.

Evaluate the ionic compositions of the mine process water, makeup water, surface water (springs), and groundwater and determine if they are unique. Ascertain whether there are any indications that the mine process water could be interacting with makeup water, surface water, or groundwater.

Compare these results with data collected and published previously, for example the data published in 1991-1993, to ensure that there have been no significant temporal shifts.

Data collected during the initial years of operation should also be examined, as should any samples representing baseline, or reference, conditions.

Discuss, in the FEIS, the influence of geothermal activity on water quality samples.]

5 cont.

[*Contamination of Shallow Groundwater*

6

The DEIS does not mention contamination of groundwater at the Hycroft Mine; however, contamination of shallow groundwater is discussed briefly in the Hycroft Mine amended Plan of Operations (September 2010; Appendix C – pg. 29). According to this document, the influence of process solution

² Characterization of Mine Leachates and the Development of a Ground-Water Monitoring Strategy for Mine Sites, EPA/600/R-99/007, February 1999.

is still evident in several shallow investigation wells that are sampled quarterly. Monitoring data indicate that the residual effects of historic losses of process solutions on shallow groundwater are diminishing, since remediation measures were initiated in 2003. Furthermore, these concentrations do not appear to be migrating away from these areas and affecting the shallow groundwater system.

6 cont.

Recommendation:

The contamination of groundwater, due to historic causes or other reasons, should be discussed in the FEIS, including any remediation measures that have been implemented. Temporal and spatial trends relevant to the geochemical characterization of site waters should also be examined.]

[Springs and Seeps

7

The DEIS states that the Proposed Action would not impact the flows of nearby springs or seeps, but offers insufficient justification for this conclusion (pg. 3-73). According to the DEIS, initial pump tests on the production and potable water wells showed favorable groundwater replenishment to the aquifer in the vicinity of the well, with projections of zero residual drain down (pg. 1-17). Pumping activities to date have confirmed these findings, with the wells producing adequate quantities of water and groundwater levels replenishing during the times of temporary closure (pg. 3-73). Detailed information on the type of testing performed (well tests, slug tests, or aquifer tests) is not presented in the DEIS. Likewise, as mentioned earlier, the DEIS provides very little information on water usage associated with the proposed project. Without more detailed information, we are unable to concur with this conclusion and remain concerned that the Proposed Action could impact the flows of nearby springs or seeps.

Recommendation:

The FEIS should provide the basis for the conclusion that the Proposed Action will not impact the flows of nearby springs or seeps. If well tests or aquifer tests were conducted to support that determination, such reports should be summarized and referenced in the FEIS and included in an Appendix.]

[Open Pits

8

The DEIS concludes that pit lakes are not anticipated due to the depth of the groundwater and the limited extent of groundwater in the vicinity of the open pits; however, this conclusion is not clearly supported in the document. The discussion on pg. 3-74 references Table 3.7-2 regarding the elevation of the water table, and Table 2.1-2 regarding the planned depth of the Project open pits, yet depths of the open pits and elevations of the water table are not presented in either of these tables. Based on our rough estimates, using Figures 1.9.1 and 3.7.3 and Table 2.1-3, as well as Drawing 1 from the Plan of Operations, it appears that pit lakes could form at the Brimstone Pit and Central Pit. Furthermore, it seems possible that the shallow perched aquifer could transect the open pits, resulting in the formation of pit lakes unless dewatering activities were implemented.

Recommendations:

The FEIS should provide the basis, including supporting documentation, for concluding that pit lakes will not form at any of the open pit locations. Include a table that shows the proposed

depths of the various pits along with the depth to groundwater at these locations, or revise Table 2.1-3 accordingly. 8 cont.

Overlay the locations of the pits onto Figure 3.7.3 in order to illustrate the groundwater table at each of the proposed pits.

Correct the incorrect references to figures and tables.]

[Inconsistencies in the DEIS make it difficult to verify the accuracy of the information presented in the document. For example, Table 2.1-3 describes the proposed open pit parameters for the Brimstone, Boneyard, Center, and Bay Area Pits (pg. 2-3); however, the locations of the Center Pit and the Bay Area Pit are not shown on the figures in the DEIS that illustrate other pits, such as Figure 1.9.1 or Figure 2.1.1. 9

Recommendation:

Provide detailed maps in the FEIS that illustrate the locations of all the open pits, including the Center Pit and Bay Area Pit.]

[According to the DEIS, the Boneyard and Bay Area Open Pits would be completely backfilled, the Center Open Pit would be backfilled up to 90 percent, and the Brimstone Open Pit would not be backfilled (pg. 2-41). Figures 2.1.10 and 2.1.11 illustrate the elevations of the proposed Brimstone Open Pit and Bay Area and Boneyard Open Pits using 2008, 2012, and 2024 topography. Elevations used in both these figures, however, do not concur with the depths presented in Table 2.1-3 for the Brimstone Pit, Bay Area Pit, and Boneyard Pit. For example, the profiles of the Brimstone Pit and the Bay Area/Boneyard Pits show that the elevation will go down to about 4,250 feet (fig. 2.1.10; fig. 2.1.11). Table 2.1-3, however, shows the following proposed pit depths: Brimstone Pit (4,300 feet), Bay Area Pit (4,350 feet), and Boneyard Pit (4,350 feet). 10

Recommendation:

Compare Figures 2.1.10 and 2.1.11 with Table 2.1-3 and verify that depths and elevations for the Brimstone Pit, Bay Area Pit, and Boneyard Pit are accurately depicted. Revise and correct figures and tables if necessary.

Explain why the Brimstone open pit will not be backfilled in the future.]

Waste Rock Characterization Study

11

The DEIS states that results from the waste rock characterization study are discussed in detail in Section 2.1.3.1 and 3.7.2.3.5 to 3.7.2.3.6 (pg. 3-73); however, Sections 3.7.2.3.5 and 3.7.2.3.6 do not exist.

Recommendation:

Revise the text in the FEIS to correctly reference the appropriate sections that discuss the waste rock characterization study.]

[Material types from the Hycroft deposit that are predicted to generate acid and leach potentially deleterious constituents when exposed to air and water include argillic, silica, and propylitic altered material that has been partially oxidized or unoxidized (pg. 3-71). The DEIS concludes, though, that predictive modeling indicates that seepage and runoff from the proposed waste rock facilities would not degrade waters of the State (SRK 2011). According to the DEIS, modeling also indicates that runoff from waste rock facility surfaces would be circum-neutral, with all chemical constituents below Nevada Division of Environmental Protection reference values (pg. 3-73). The DEIS does not, however, reference specific documents that support this conclusion. 12

Recommendation:

Include supporting documentation, within the FEIS, for the conclusion that seepage and runoff from the proposed waste rock facilities would be circum-neutral and are not expected to degrade waters of the state. Describe the infiltration and seepage rates that were used to make this determination. Explain exactly what is meant by “circum-neutral” in this context.]

[*Waste Rock Facilities* 13

The DEIS states that the waste rock facilities have been designed to manage potentially acid generating materials and to minimize visual contrasts with natural topography (pg. 2-8). Such facilities will be constructed by end dumping waste rock from mine haul trucks over existing waste rock facilities, onto native alluvial soil, or into existing open pits. Twenty-four inches of non-PAG material, including 6 inches of growth media, would be deposited over waste rock material to limit the exposure to meteoric water during operation (pg. 2-8). The DEIS does not, however, describe what will be used at the bottom or base of the waste rock facilities.

Recommendation:

Describe what will be used underneath the waste rock facilities. If liners or compacted soil and/or clay will not be used, the FEIS should provide sufficient justification for the conclusion that such protective measures would not be necessary to prevent environmental degradation.]

[After closure, if any slopes of waste and development rock piles are left without encapsulation by non-PAG material, they would be sloped prior to placement of a two-foot thickness of non-PAG material, followed by six inches of growth media (pg. 2-42). These requirements differ, however, from those described in Section 2.1.3.1 (pg. 2-8) and Section 2.1.18.1 (pg. 2-41). 14

Recommendations:

Provide the basis for utilizing a greater thickness of non-PAG material and growth media (30 inches) on the slopes of the waste and development rock piles, as compared to the waste rock facilities (24 inches). Correct inconsistencies within the text regarding cover requirements, particularly in Sections 2.1.3.1 and 2.1.18.1.

Include a copy of the Waste Rock Management Plan in the FEIS within an appendix.]

[Heap Leach Pads

15

The DEIS states that a growth media cover would be placed on the heap leach pads to a depth of six inches to isolate the process materials in the heap leach pads from storm water, as demonstrated on the Lewis heap leach facility (pg. 2-51). We note, however, that the cover requirements at waste rock facilities appear to be more stringent than at the heap leach pads, as the waste rock facilities utilize 24 inches of non-PAG material, including 6 inches of growth medium (pg. 2-41). Furthermore, the DEIS states that a soil cover is not needed for the purpose of limiting infiltration of meteoric water into the heaps (pg. 2-50).

Recommendations:

The FEIS should clarify why the requirements for the amount of cover differ for heap leach pads versus waste rock facilities.

Clarify whether the underlying media and the cover that will be used at the other heap leach facilities are, in fact, comparable to those used at the Lewis heap leach facility. If not, then results might not be comparable to the Lewis heap leach facility, and additional precautions may be needed.]

[The DEIS states that the Brimstone heap leach facility would be expanded by placing waste rock to the north of the heap to create an engineered (geotechnically sound) and compacted fill, on which the four process ponds would be located (pg. 2-10). EPA is concerned about the suitability of using waste rock as the base for four process ponds associated with the heap leach facility. Even if liners are used on top of the waste rock, we are concerned that the compacted fill and waste rock might shift due to varying loads on top of the facilities or seismic activity.

16

Recommendation:

The FEIS should discuss the suitability of using waste rock as the base for four process ponds in the heap leach facilities and provide supporting documentation to account for the geotechnical suitability of such an action.]

[Post-Reclamation Monitoring and Maintenance

17

Heap effluent drainage from closed heaps would be monitored in accordance with the Water Pollution Control Permit. Post-closure vegetation monitoring would consist of surveys coordinated with the Bureau of Land Management and the Nevada Division of Environmental Protection. Post-mining ground water quality would be monitored according to the requirements established by the NDEP upon approval of the permanent closure plan, with the goal of demonstrating non-degradation of groundwater quality (pg. 2-54).

Table 2.1-15 illustrates the proposed reclamation schedule for the Hycroft Mine. According to this table, monitoring will be conducted until 2035 (pg. 2-33). The DEIS states that post-closure monitoring time frames are based on the regulatory minimum, but could be extended based on actual field conditions.

Recommendations:

17 cont.

Include a copy of the Hycroft Mine Monitoring Plan in the FEIS and describe what type of conditions would lead to extended monitoring.

Describe the groundwater monitoring that would be undertaken in accordance with existing permits.

Describe the water quality monitoring that will be required to ensure compliance with water quality standards. Describe the locations of all groundwater monitoring wells and points of compliance on the site, including screening intervals, parameters to be monitored, and monitoring frequencies.

Air Quality

[National Ambient Air Quality Standards

18

On page 3-18 (Summary of Impact 3.2.3.3-2), the DEIS states that the modeled NO₂ and SO₂ 1-hour concentrations would be in exceedance of the NAAQS, but concludes: "Even with this impact, the Proposed Action would be in compliance with the FCAA. This is due to the NAAQS exceedance resulting from mobile and fugitive sources of NO₂ and SO₂. The mobile sources are regulated under Title II of the FCAA, which requires engine manufacturers to meet specific emission standards. The Proposed Action is regulated under Title I of the FCAA. Therefore, these mobile and fugitive sources are not considered when a permit is issued under Title I of the FCAA," On page 3-26 (Summary of Impact 3.2.3.4-2), the DEIS sets forth the same type of rationale for finding that the No Action Alternative would be in compliance with the FCAA, notwithstanding the modeling results that indicate that there would be exceedances of the 1-hour NO₂ and SO₂ NAAQS. Further, this information is summarized in Table 2.3-1 (pgs. 2-61 and 2-62).

We recognize that some of the emissions sources associated with the Proposed Action would be covered by a permit issued by Bureau of Air Pollution Control, and some emissions sources associated with the Proposed Action (such as the combustion emissions from mobile equipment) would not be covered. We also recognize that the permit would be issued under a program approved by EPA as meeting the requirements of Title I of the FCAA, and that nearly all of the mobile sources are, to some degree, subject to emissions standards established by EPA under regulations promulgated under Title II of the FCAA. However, source-specific emissions standards are fundamentally different than health-based ambient air quality standards. For NEPA purposes, ambient air quality impact analyses should not distinguish between Title I sources and Title II sources, nor should such analyses discount emissions sources because they were manufactured to meet certain emissions standards. Instead, the impact analyses should take into account all Project-related emissions sources (fugitive and non-fugitive stationary, area, and mobile) and evaluate whether such sources, considered together, would cause or contribute to an exceedance of the NAAQS.

Based on the results presented in the DEIS, it is clear that the emissions sources associated with the Proposed Action would result in modeled exceedances of the one-hour NO₂ and SO₂ NAAQS. This does not mean that the Proposed Action would violate the FCAA, but it does indicate that the project would likely result in an adverse environmental impact.

Recommendation:

Revise the text in Section 3.2.3.3.1, Section 3.2.3.4.1, and Table 2.3-1 accordingly, and identify any feasible mitigation measures.] 18 cont.

[On page 3-26 (Summary of Impact 3.2.3.4-2), the DEIS states that the NO₂ and SO₂ modeled concentrations would be expected to be above the NAAQS (except the 1-hour standards). The text is incorrect as written and should be revised to state the NO₂ and SO₂ modeled concentrations would be expected to be below the NAAQS (except the 1-hour standards). This error is repeated in Table 2.3-1 (pg. 2-61). 19

Recommendation:

Revise the text in Section 3.2.3.4.1 (pg. 3-26) and Table 2.3-1 (pg. 2-61), accordingly.]

[The DEIS describes and estimates air emissions from the proposed expansion of the Hycroft Mine. The DEIS states that PM₁₀ and PM_{2.5} emissions are generated by almost all sources listed in Table 3.2-4, but this table lists background values for criteria pollutants instead of emission sources (pg. 3-16). 20

Recommendation:

Revise the text in Section 3.2.3.3.1 to indicate the correct table.]

[*Mercury Emissions* 21

The DEIS states that the current operations are permitted for a mercury emissions rate of 0.00529 ton/year, approximately 20 percent less than the projected emissions of the Proposed Action (pg. 3-26). The text appears to be incorrect as written, since 20% less than the projected emissions³ of the Proposed Action would be 0.02032 ton/year. Based on the information provided in the DEIS, it appears that mercury emissions associated with the Proposed Action will be 4-5 times higher than current emissions.

Recommendations:

Revise the text to provide the correct numbers.

Clarify whether the Mercury Operating Permit to Construct will need to be revised; and provide the status of any such revision.]

[*Recommended Measures to Reduce Emissions* 22

The area where the Proposed Project will be implemented is in “attainment – unclassifiable” for all pollutants having an air quality standard. In the interest of minimizing adverse impacts, EPA recommends consideration of measures to reduce emissions of criteria air pollutants and hazardous air pollutants.]

³ The projected emissions of mercury for the Proposed Action are 0.0254 tpy (pg. 3-23). Twenty percent of the projected emissions would be $0.2 * 0.0254 = 0.00508$ tpy. Twenty percent less than the projected emissions would then be $0.0254 - 0.00508 = 0.02032$.

Recommendations:

- [• *Equipment Emissions Mitigation Plan (EEMP)* – The FEIS should identify the need for an EEMP. An EEMP will identify actions to reduce diesel particulate, CO, hydrocarbons, and NO_x associated with construction activities. We recommend that the EEMP require that all construction-related engines: 23

- are tuned to the engine manufacturer’s specification in accordance with an appropriate time frame;
- do not idle for more than five minutes (unless, in the case of certain drilling engines, it is necessary for the operating scope);
- are not tampered with in order to increase engine horsepower;
- include particulate traps, oxidation catalysts and other suitable control devices on all construction equipment used at the Project site;
- use diesel fuel having a sulfur content of 15 parts per million or less, or other suitable alternative diesel fuel, unless such fuel cannot be reasonably procured in the market area; and
- include control devices to reduce air emissions. The determination of which equipment is suitable for control devices should be made by an independent Licensed Mechanical Engineer. Equipment suitable for control devices may include drilling equipment, generators, compressors, graders, bulldozers, and dump trucks.]

- [• *Fugitive Dust Control Plan* - The FEIS should identify the need for *Fugitive Dust Control Plan*. We recommend that it include these general recommendations: 24

- Stabilize open storage piles and by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions; and
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.]

Cumulative Impacts

[In the cumulative impacts analysis, the DEIS notes that the Proposed Action would result in significant cumulative impacts to air quality due to the exceedances in the 1-hour NO₂ and SO₂ NAAQS (pg. 4-24). In contrast, the DEIS does not discuss the significance of the 1-hour exceedances in Chapter 3 and concludes, instead, that the Proposed Action would be in compliance with the FCAA, because the NAAQS exceedances result from mobile and fugitive sources of NO₂ and SO₂. [Mobile sources are regulated under Title II of the FCAA; whereas, the Proposed Action is regulated under Title I of the FCAA.] 25

Recommendation:

Discuss the significance of the 1-hour exceedances within Chapter 3 as well as Chapter 4 (Cumulative Impacts).]

[The DEIS includes estimates for the criteria pollutant emissions (PM₁₀, SO₂, NO₂, and CO) from existing mining operations within the Cumulative Effects Study Area, but does not include similar estimates for Hazardous Air Pollutants.]

26

Recommendation:

Provide estimates for Hazardous Air Pollutants from the other mining projects within the Cumulative Effects Study Area.]

[The Cumulative Effects Study Area for water quality and quantity (surface and ground) is defined as the Devil's Corral HUC 5 Watershed (pg. 4-8). The DEIS states that no impacts to groundwater quality or quantity were identified in the Proposed Action or alternatives, so the cumulative impacts analysis addresses only surface water. As we noted previously, however, contamination of shallow groundwater was discussed in the Hycroft Mine Expansion Project Amendment to Plan of Operations; therefore, the potential impacts to shallow groundwater and the existing contamination are issues that should be addressed in the FEIS. Furthermore, discrepancies were noted regarding the extent of HRDI's water rights and water usage. Consumptive use of groundwater in a desert environment is a potentially significant issue and should be examined in greater detail.]

27

Recommendations:

Extend the Cumulative Effects Study Area for groundwater to encompass the Black Rock Desert Hydrographic Basin.

Discuss the contamination of shallow and deep groundwater, due to historic causes or other reasons, in the FEIS. Discuss any remediation measures that have been implemented at the Hycroft Mine or any other mine within the newly defined Cumulative Effects Study Area.

Demonstrate whether there is sufficient groundwater for the lifetime of this Project and other reasonably foreseeable projects in the study area. Describe the current status of groundwater within the Black Rock Desert Hydrographic Basin, including whether it is over-allocated.

Discuss the potential effect of climate change on the Proposed Project and groundwater development.]

Biological Resources, Habitat and Wildlife

[Up to 2,172 acres of surface disturbance and vegetation removal would occur as a result of the Hycroft Mine expansion project. Such activities could adversely affect sage grouse, golden eagles, or other raptors, which are known to occur in and around the Project area. The BLM has recently issued Greater Sage-Grouse Conservation Guidance in the form of two Instructional Memoranda (IM No. 2012-043 and IM No. 2012-044) that are designed to guide both immediate and longer-term conservation actions aimed at conserving the greater sage-grouse and its sagebrush habitat in 10 Western states, including Nevada. Neither of these new IMs, however, are mentioned in the DEIS.]

28

All raptor and owl species are protected under the Migratory Bird Treaty Act. The golden eagle and bald eagle also receive protection under the Bald and Golden Eagle Protection Act. In September 2009, the

U.S. Fish and Wildlife Service finalized permit regulations under the BGEPA for the take of bald and golden eagles on a limited basis, provided that the take is compatible with preservation of the eagle and cannot be practicably avoided. The final rule states that if advanced conservation practices can be developed to significantly reduce take, the operator of a facility may qualify for a programmatic take permit. Most permits under the new regulations would authorize *disturbance*, rather than take. Projects or activities that could impact golden or bald eagles may require the preparation of an Eagle Conservation Plan. 28 cont.

Recommendations:

Work with the USFWS to ensure that requirements regarding the protection of eagles and other raptors are appropriately addressed in the FEIS.

Consider incorporating appropriate actions and management strategies included in the BLM's Greater Sage Grouse IMs into the FEIS.

Mitigation and monitoring measures that result from consultation with USFWS to protect sensitive biological resources should be included in the FEIS and incorporated into the Record of Decision.

Discuss and identify potential compensatory mitigation for loss of sage-grouse habitat. Coordinate closely with the USFWS in the identification of such lands to ensure that compensatory lands are of comparable or superior quality. Discuss mechanisms that will ensure habitat selected for compensatory mitigation will be protected in perpetuity.

The FEIS should include a requirement for a Worker Environmental Awareness Training program in order to ensure project personnel and contractors are aware of their responsibility to implement the Best Management Practices and mitigation measures. Knowledge and practice of these measures should be the responsibility of all on-site personnel.]

Geology

[Geology in the Project Area is shown on Figure 3.8.1, but the locations of the proposed facilities are not illustrated on the map. 29

Recommendation:

Overlay the locations of the pits, waste rock facilities, and heap leach pads as seen on Figure 2.1.1 onto Figure 3.8.1 to provide greater clarity to the reader.]

Solar Energy Development as an Option for Future Use of Reclaimed Areas

[According to the DEIS, HRDI intends to explore the nature and extent of the geothermal resources at the Hycroft Mine and, if appropriate, develop those resources for purposes of power generation. From the proposed reclamation plans, it appears that there will be large flat surfaces at the top of many of the reclaimed mining facilities, including pits, waste rock facilities, heap leach pads, and process ponds. Such reclaimed mine surfaces may be appropriate for other types of power generation as well. 30

Recommendation:

Consider the suitability of the reclaimed mine surfaces for solar as well as geothermal energy development.]

30 cont.

Financial Assurance

[As noted in Chapter 4 (Cumulative Effects) of the DEIS, State and federal regulations require project operators of Notices and plans of operation to provide financial assurance to guarantee that surface disturbance due to mineral activities would be reclaimed when mineral exploration and mining activities have been completed (pgs. 4-27; 4-29; 4-30; 4-34; and 4-35). Typically, requirements regarding financial assurance for reclamation are noted in the Description of the Proposed Action and Alternatives (Chapter 2) of a DEIS. We found no further mention of such requirements in the DEIS for the Hycroft Mine Expansion Project, except for the mention of a Reclamation Bond Determination within Table 1.6-1 (Major Permits and Authorizations).]

31

Recommendations:

The FEIS should:

Note any existing closure and reclamation bond for the Hycroft Mine, and discuss any additional bond that would be required for the Proposed Project. We recommend presenting this information in Chapter 2 of the FEIS.

Discuss the project's need, if any, for long-term financial assurance. If long-term monitoring would be required, the FEIS should include at least a draft long-term financial assurance cost estimate and address how financial assurance requirements would be met (based on future monitoring), should the project proponent be no longer financially viable following the unplanned cessation or planned conclusion of operations.



Fort McDermitt Paiute And Shoshone Tribe

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April 5, 2012

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Sent via pdf email and parcel post

RE: Comments on the Hycroft Mine Expansion Project Draft Environmental Impact Statement (DOI-BLM-NV-W030-2011-0001-EIS).

Dear Ms. Kathleen Rehberg:

The Fort McDermitt Paiute and Shoshone Tribe ("Tribe") has reviewed the Hycroft Mine Expansion Project Draft EIS (DOI-BLM-NV-W030-2011-0001-EIS). HRDI submitted a revised Plan of Operation (NVN-064641) in April 2010 to the BLM. The Project proposes to expand existing mining operations and the Project boundary.

Our Tribe is a federally recognized Indian tribe whose aboriginal homelands encompass the entire Project area, the Hycroft Mine, and lands now administered by the Winnemucca District BLM. The Tribe's current reservation lands include areas of Nevada and Oregon, but our Tribe still uses our aboriginal territory for hunting, fishing, gathering, sacred/religious purposes, and other uses. Some tribal uses occur around the Hycroft Mine area. It is clear from the DEIS that there will be severe and irreparable environmental impacts from the proposed project that would affect our Tribe. As such, our Tribe has significant concerns about the proposed expansion of the Hycroft Mine. Our specific comments are detailed below.

I. INADEQUATE RANGE OF ALTERNATIVES

1

The DEIS does not analyze an adequate range of alternatives. The DEIS only analyzes the Proposed Action and No Action Alternative. The DEIS states that “To date, no issues have arisen that would result in the formulation of an additional alternative(s). Three other alternatives were considered but eliminated from detailed analysis and are discussed in Section 2.2.2.” DEIS at ES-2. The DEIS identifies that the “alternatives were considered relative to the criteria in Section 2.1.” DEIS at 2-57. The DEIS further states:

The analysis of alternatives in this EIS is based on the following criteria: a) public or agency concern; b) technical feasibility; c) potential to reduce an environmental impact of the Proposed Action; d) ability to meet the purpose of and need for the Proposed Action; and e) compliance with regulatory and legal guidance (i.e., National Mineral Policy Act). . . . Alternatives to the Proposed Action derived through the scoping process (internal and public) include the following: No Action; Daylight Only Hours of Operation; Modified Exploration Activities; and Different WRF and Heap Leach Pad Configurations [bullet points omitted].” DEIS at 2-55.

The BLM indicates that the scoping process identified numerous environmental parameters that must be addressed in the EIS, but the “Alternatives Considered But Eliminated From Detailed Analysis” were not reflective of many of the major concerns identified and listed. DEIS at ES-2 and 3. Thus, the BLM failed to appropriately construct a reasonable range of alternatives given the scoping issues and issues that our Tribe submitted to the BLM (e.g., letter dated February 25, 2011). The BLM also failed to develop an appropriate range of alternatives given potential environmental impacts.

NEPA requires the development, study, and description of “appropriate alternatives to recommend courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources.” Moreover, the BLM has the directive to analyze:

a reasonable number to cover the full spectrum of alternatives. . . . Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.” BLM Handbook at 49, 50.

Given the BLM's failure to analyze a reasonable range of alternatives and its failure to develop sufficient alternatives based on the scoping process and the best available information, the DEIS alternatives clearly and simply respond to the applicant's desired outcome. Even a preliminary constraints analysis for the proposed expansion would have demonstrated significant impacts of particular resources, including cultural resources and Native American values. Indeed, the DEIS identifies that the Proposed Action would result in adverse impacts to 21 sites that are eligible for the National Register of Historic Properties under the NHPA. DEIS at 2-63. These significant impacts alone provide a trigger for the need and

development of reasonable alternatives, but the BLM avoids additional working alternatives by requiring treatment plans or other mitigation that still allow for the Proposed Action to be selected as the preferred alternative. These issues are errors of noncompliance.

1 cont.

Under NEPA, an EIS must analyze appropriate alternatives that conform to BLM land use plans. The DEIS states that the “Proposed Action conforms to the BLM's Sonoma Gerlach Management Framework Plan (MFP)”, basing the sole conformance criterion to Section .42 Minerals of the MFP that has the stated objective to “[m]ake all public lands and other federally owned minerals available for the exploration and development of mineral and material commodities.” DEIS at 1-8. The DEIS also states that the “Proposed Action conforms to the BLM's Paradise Denio MFP”, again using only a single conformance criterion to determine conformance – “[p]rovide the public with the opportunity to acquire minerals from the public lands to meet market demands.” DEIS at 1-8. The DEIS singles out a single section objective to base the document's conformance, rather than examining the entirety of MFPs for conformance. This error results in noncompliance between the DEIS and MFPs.

The range of alternatives analyzed fails to match the Federal Land Policy and Management Act of 1976 (Pub. L. 94-579, 94th Congress), as amended, as a multi-use mandate. FLPMA is the BLM's “organic act that establishes the agency's multiple-use mandate to serve present and future generations.” Instead, the alternatives simply respond to the applicant's revised Plan to expand mining operations. The DEIS fails to consider alternatives that meet the multiple-use mandate that would meet both the applicant's expansion plans and the BLM's mandate to manage lands in manner that will:

protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use. 43 USC 1701 § 102(8).

Thus, the DEIS must analyze an appropriate range of alternatives that meets that multiple-use mandate and conforms with the entirety of the MFP's.]

[II. FAILURE TO ADEQUATELY CONSIDER PROJECT CONFORMANCE WITH BLM LAND USE PLANS

2

Under NEPA, an EIS is required to inform the reader as to whether the project would conform with the applicable BLM land use plans. 43 CFR 1610.5-3, 43 CFR 2920.2-5. The BLM's planning regulations state that conformance or conformity means that “a resource management action shall be specifically provided for in the plan, or if not specifically mentioned, shall be clearly consistent with the terms, conditions, and decisions of the approved plan or amendment.” 43 CFR 1601.0-5(b). According to the BLM 2008 Handbook, if the proposed action does not conform to the existing land use plan, either the proposal should be modified to conform, or a land use plan amendment that allows the action to be

considered. Moreover, if the existing land use plan is silent about an activity, the plan direction should be reviewed, including the broad and programmatic goals and objectives.

2 cont.

This EIS fails to make the required conformity determinations. First, although the DEIS states that it conforms to the MFPs, it fails to make any finding of conformance other than a single criterion of meeting Objective M-1 of the SGMFP and Objective M 1.0. DEIS at 1-8. It does not make any conclusions or findings of conformity with other salient parameters in the MFPs. The DEIS states only that “Proposed Action conforms to the BLM's Sonoma Gerlach Management Framework Plan (MFP)” and that the “Proposed Action conforms to the BLM's Paradise Denio MFP”. DEIS at 1-8. Those statements are not a finding on conformance. The DEIS must, and currently fails to, answer the questions: Does the project conform? Will this be multiple use?

Second, this DEIS fails to disclose whether or not the Proposed Action and alternatives have possible conflicts with the applicable BLM land use plans and/or MFPs. The NEPA question is compliance with land use plans: “Possible conflicts between the proposed action and the objectives of Federal . . . land use plans . . .” The DEIS must disclose these possible conflicts. If that information is not in the DEIS, the DEIS must be revised so this disclosure can be subject to public notice and comment. This failure does not meet NEPA's requirements for full and reasonable disclosure of the Project land use plan conformity.

Third, the DEIS fails to address whether it conforms with the Winnemucca District Draft Resource Management Plan.]

III. BLM MAY NOT APPROVE PROJECTS NOT IN CONFORMANCE WITH ANY AND ALL APPLICABLE LAND USE PLANS

3

If the Project does not comply with its land use plans (MFPs or RMPs), then the BLM is not permitted to approve the Project (unless, prior to Project approval, it amends the land use plans to eliminate the conflict— such an amendment also would be subject to NEPA review). The FLPMA question is compliance with the land use plans, as well, except that **compliance is mandatory**, as indicated in the *Shasta Resources Council v. U.S. Dept. of Interior*, 629 F.Supp.2d 1045, 1054 (E.D. Cal. 2009) case:

Furthermore, given the dictates of the 1993 RMP, it is eminently probable that the local easement alternative was precluded by statute. See 43 U.S.C. 1732(a) (“The Secretary shall manage the public lands ... in accordance with the land use plans developed by him under section 1712”); *Utah Shared Access Alliance v.*

Carpenter, 463 F.3d 1125, 1129 (10th Cir.2006) (“FLPMA prohibits the BLM from taking actions inconsistent with the provisions of RMPs.” (citing *Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 69, 124 S.Ct. 2373, 159 L.Ed.2d 137 (2004); 43 U.S.C. § 1732(a); 43 C.F.R. § 1610.5-3)); *Klamath Siskiyou Wildlands Ctr. v.*

Boody, 468 F.3d 549, 557 (9th Cir.2006) (providing that “provisions of FLPMA ... require BLM to manage public lands in accordance with resource management plans once they have been established”). Plaintiffs did not formally challenge the 1993 RMP when it was issued fifteen years ago (AR 43, 933, 1583-84), and any new challenge to its provisions would be untimely under the APA's six-year statute of limitations. See 5 U.S.C. § 704; 28 U.S.C. § 2401(a).

Although the facts of that case are not the facts for this Project, the central notion of BLM land use plans and the compliance with those land use plans (RMPs in the above case) remains, with citations. The DEIS must therefore answer the question: Does the Project comply with the any and all applicable land use plans? If not, the BLM may not approve the Project under the current land use plans. The DEIS is impermissibly mute on this critical issue. Therefore, it must be revised to include the required conformity analysis and recirculated for public review and comment.

A review of the Project impacts as identified in the DEIS, and those impacts that the BLM did not disclose in this DEIS, with respect to the BLM's applicable land use plans stated on Page 1-8 indicates that the Project would not conform with those land use plans.]

IV. INADEQUATE DISCLOSURE AND MITIGATION OF IMPACTS ON CULTURAL RESOURCES, NATIVE AMERICAN RELIGIOUS, VALUES AND INDIAN SACRED SITES

The DEIS's analysis of impacts on culturally significant resources, sacred sites, and exercise of Tribal religion is severely deficient. The DEIS greatly diminishes the importance of the area and its cultural/sacred resources on affected Tribes. The DEIS falsely states that no impacts will occur on sacred sites and religious freedom rights. [The BLM failed to uphold its trust responsibilities to the Tribe by approving this Project with significant impacts to tribal trust resources and sacred areas.]The BLM failed to provide meaningful and adequate mitigation measures that would protect tribal interests and resources.

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The BLM failed to disclose impacts on the Pulpit Rock area sacred site. [Preliminary Class I assessments of the area identify the Pulpit Rock area as a sacred site to Northern Paiute and Western Shoshone.]This data is provided in an ethnographic document prepared for the BLM Nevada State Office in 2002¹. Bengston (2002) report identified that:

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The focus of this document is to provide a contextual basis for ongoing consultations between the contemporary Northern Paiute and Western Shoshone tribes in Nevada and the BLM in northern Nevada (i.e., Winnemucca, Battle Mountain, Elko, Ely, and Carson City field offices; see Figure 1.1). This has been accomplished through a review,

1 Bengston, G (2002) Northern Paiute and Western Shoshone Land Use in Northern Nevada: A Class I Ethnographic/Ethnohistoric Overview. SWCA Cultural Resources Report No. 02-551. Submitted to BLM Nevada State Office, December 16, 2002.

analysis, and synthesis of existing ethnographic and ethnohistoric literature and archival materials containing information on Traditional Cultural Properties, sacred sites, traditional lifeway areas, other culturally important places, Native American Graves Protection and Repatriation Act (NAGPRA) concerns, and other heritage issues between contemporary Northern Paiute and Western Shoshone tribes in Nevada.

To facilitate its use as a cultural resources management tool, this report has been divided into the following components. Chapter 1 contains introductory information, including a brief mention of the laws and other legislation pertinent to Native American consultation regarding the BLM. To provide a background and contextual basis for the current study, Chapters 2 and 3 provide a brief ethnohistoric and more extensive ethnographic information on the Northern Paiutes and Western Shoshones. Chapter 4 contains a brief description of the ethnographic/ethnohistoric studies undertaken to date in Nevada to identify culturally-significant places of importance to Northern Paiutes and Western Shoshones. The chapter also includes a list of the culturally-significant places identified during these studies, as well as a listing of other concerns and issues identified through Native American consultation for these projects. In addition to a discussion on the definition and evaluation of what is called a "Traditional Cultural Property" or TCP, Chapter 5 provides a discussion of culturally-significant property types, as well as potential mitigation treatment for these properties. Chapter 6 presents a listing by property type and brief discussion of culturally-significant sites identified during the archival and literature review. Other Native American issues, concerns, and recommendations, as ascertained in the studies discussed in Chapter 4, are discussed in Chapter 7. Chapter 8 contains recommendations for further studies, especially in regards to obvious research information gaps. Bengston Report (2002) at 1; 2.

The purpose of this Bengston 2002 Report, which BLM contracted with SWCA to provide, was for the purpose of having information on culturally significant areas, including sacred sites/areas, either for government-to-government consultation purposes or for resource management and planning purpose which includes NEPA.

The Bengston Report provided the Winnemucca District BLM with known sacred sites within the Project Area and adjacent lands no matter whether our Tribe submitted the information to BLM or not. [The DEIS attempts to make the case that the BLM was unaware of any sacred sites/areas within the proposed expansion boundary (or adjacent areas) because our Tribe was unable to attend several site visits due to extenuating circumstances.] BLM made the false determination that:

Tribal participants have not made any formal TCP designations or identified specific locations of religious or spiritual activity within or in close proximity to the Project Area.

Concern was expressed on what impact the Proposed Action would have on springs in the area, and Pulpit Rock. Some springs are considered sacred by the Northern Paiutes and Shoshone, and some are believed to be the home of supernatural creatures dubbed "Water Babies" (Hultkrantz 1986). Neither the springs or Pulpit Rock would be impacted by the Proposed Action; therefore, no direct or indirect impacts are anticipated from the Proposed Action. However, Native American coordination and consultation are ongoing. DEIS at 3-47, 3-48.

That determination is false in several respects. First, the Proposed Action would directly and indirectly impact the Pulpit Rock sacred site. Second, formal consultation with our Tribe has not occurred.]

[The Pulpit Rock area is a sacred site to our Tribe.] [The Pulpit Rock sacred site includes area surrounding Pulpit Rock and extends northeast to encompass the basalt cliffs and surrounding area.] [The proposed expansion boundary would directly impact this sacred land.] The Proposed Action would result in:

- ▲ [lost or reduced access to the sacred site,]
- ▲ [physical destruction of the sacred site,]
- ▲ [alteration of setting,
- ▲ impairment of the character of the area, and]
- ▲ [would render the sacred site unsuitable for religious purposes.]

[These impacts would be direct violations of EO 13007, NHPA, AIRFA/RFRA.] Moreover, the DEIS provides no information on sacred/spiritual trails and the corresponding impacts analysis and mitigation, even though preliminary information has been provided to the BLM in Bengston's Report. BLM failed to examine their own documents to disclose tribal sacred areas.

Federal mandates and executive orders require the BLM to consult with our Tribe in an appropriate government-to-government consultation. DEIS at 3-46 states:

In accordance with the NHPA (P.L. 89-665), the NEPA (P.L. 91-190), the FLPMA (P. L.94-579), the AIRFA (P.L. 95-341), the NAGPRA (P.L. 101-601), ARPA (P.L. 96-95), EO 13007 (Indian Sacred Sites, 1996), and EO 13175 (Consultation and Coordination with Indian Tribal Governments 2000), the BLM must provide affected Tribes, organizations, and/or individuals an opportunity to participate in, comment, and consult on proposed actions that might impact resources, sites, or activities of concern. Through consultation initiation with area tribes, BLM must attempt to identify specific

traditional/cultural/spiritual sites, activities, and resources and limit, reduce, or possibly eliminate any negative impacts.

[The BLM failed to use existing information and resources to identify and protect sacred sites and historic properties from the Proposed Action in this DEIS.] The BLM failed to act in a government-to-government consultation manner with our Tribe, [failed to share relevant cultural resource/prehistoric information from their Class I and Class III inventories,] and failed to provide our Tribe with a [reasonable opportunity to participate in determining and protecting eligible properties under NHPA] and sacred sites under EO 13007 and AIRFA/RFRA. 16
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The BLM and our Tribe have arranged meetings and site visits to the Project Area. Our Tribe has attended meetings with the BLM. [Both BLM and our Tribe also have canceled various prearranged sites visits on numerous occasions.] The BLM incorrectly used those planned site visits to meet their consultation obligations. The DEIS never mentions that our Tribe attended any meetings with the BLM regarding this project when in fact the Tribe did. Further, the BLM has used site visit meetings' and cancellation of those meetings as a basis to prejudice our Tribe in this DEIS-NEPA process regarding consultation, even though BLM has canceled those meetings on occasion. The project site visit meetings are not formal government-to-government consultation. 19

The DEIS fails to disclose how many sites important to Native Americans will be adversely affected by the Proposed Action or by any alternatives. The DEIS states incorrectly that "Neither the springs or Pulpit Rock would be impacted by the Proposed Action; therefore, no direct or indirect impacts are anticipated from the Proposed Action." [The BLM must revise the DEIS to provide the correct information.] [The DEIS also does not disclose the extent or magnitude of effects either on culturally significant eligible historic properties or on sacred sites/trails.] It is not simply a numbers exercise of how many sites/locations. The DEIS then fails to address the cumulative impacts of the Proposed Action to examine extent and magnitude in addition to numbers of sites/locations, along with other past, present, and future actions on the cultural sites, cultural practices, and beliefs. The DEIS has no assessment of this question whatsoever. Furthermore, the DEIS fails to fully disclose why a fraction of the historic sites were eligible while others were not eligible on the National Register, and the BLM failed to seek Tribal input on eligible prehistoric sites or other culturally significant properties. [No discussion was provided, nor did BLM seek any Tribal guidance/input, about how disputes between the Tribe and the BLM would be resolved regarding significance of historic properties.] The BLM also did not seek any guidance/input from our Tribe as to what was an appropriate delineation of the Pulpit Rock sacred area. Instead, the BLM incorrectly reduced the sacred site to only include an extremely small area, or point. Thus, there is insufficient information and false information presented in this DEIS to satisfy requirements under NEPA, NHPA, EO 13007, AIRFA, and other mandates. 20
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Because there are sacred areas and culturally significant sites/resources adjacent to and within the proposed expansion area, [our Tribe requested that the BLM conduct an ethnographic study] early on in the NEPA process for this project. Our Tribe made that request during various conversations with the BLM, as indicated and acknowledged by the BLM in a letter sent to the FMPST Chairman on February 13, 2012 (re: 8160, 1790, 3800, NV030.00). The BLM did not date their letter. The letter states:

23

During our conversations, you have requested that I require. . . the preparation of an ethnographic study. I have considered your request in light of the Draft EIS findings and reflective briefings by staff Archaeologists, and I have decided to not require an ethnographic study for this project.

Our Tribe's determination is that site visits with BLM staff are completely inadequate to provide the necessary kind of information on the significance of the sacred sites and cultural areas within and adjacent to the Project Area in a manner that our Tribe, its elders, and spiritual leaders can provide. The BLM is fully aware of this and as such has precluded our Tribe from having a fair and reasonable opportunity to participate in the NEPA and NHPA process. The BLM has also precluded our Tribe from having a fair and reasonable opportunity to provide the necessary information about sacred areas/trails in this DEIS/NEPA process. The BLM offered to our Tribe to do an ethnographic study that would be available for future projects, but not for the Hycroft Mine Expansion Project. The BLM has thus precluded the Tribe from having a reasonable opportunity to participate in the resolution of [adverse impacts as is required under 36 CFR 800.2(c)(ii)(A).]

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The BLM also failed to make a reasonable and good faith effort to attach religious and cultural experiences to the historic properties in the area of potential effects. [36 CFR 800.3(f).] The DEIS largely ignores the significance of areas within and adjacent to the Project Area for our Tribe. For example, BLM failed to conduct an ethnographic study and failed to consider important existing information. The DEIS only mentions Pulpit Rock sacred area in one instance and provides no information about the importance of that site and other sacred areas. DEIS at 3-47. NEPA documents are required to "provide full and fair discussion" of environmental impacts. 40 CFR 1502.1. The courts have repeatedly affirmed that federal agencies take a hard look at the potential environmental consequences of a proposed action. Moreover, the BLM is required (1) to consider every significant aspect of the environmental impact of a proposed action and (2) to inform the public that it has indeed considered environmental concerns in its decision-making process. Both the BLM's refusal to conduct the ethnographic study in order to provide the necessary information and BLM's failure to disclose information in this DEIS are violations of NEPA.

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The federal government is charged with moral obligations of the highest responsibility and trust. Its conduct, as disclosed in the acts of those who represent it in dealings with the Indians, should therefore be judged by the most exacting fiduciary standards. The trust responsibility restrains government action that affects Indians and therefore is an important source of protection for Indian rights. This trust responsibility applies to all federal actions or projects and agencies that occur beyond Indian reservation boundaries. The Tribes have the right to maintain their religious practices in the same place and in the same manner as their ancestors have since time immemorial. The federal government's trust responsibilities to the Tribe are such that government actions must prevent adverse impacts on American Indian religious beliefs and practices, and to protect the spiritual lives of tribal members now and into the foreseeable future. In this case, the [BLM has failed to uphold its trust obligations to the Tribe.] Furthermore, the BLM has not complied with numerous Executive Orders that apply to federal agency actions and are specifically designed to protect Indian interests. E.g., [EO 13007] (agencies must “avoid adversely affecting the physical integrity of such sacred sites”); EO 11593 (agencies shall “administer the cultural properties under their control in a spirit of stewardship and trusteeship”). Additionally, violation of NEPA, NHPA, EO 13007, AIRFA in this DEIS does not fulfill that trust responsibility.

26

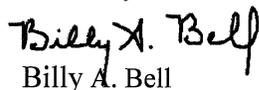
27

V. CONCLUSION

It is clear that the Hycroft Mine Expansion DEIS is significantly flawed in the development and analysis of alternatives, conformance with applicable BLM land use plans, and disclosure and mitigation of cultural resources, Native American values, and Indian sacred sites. Given these flaws, the BLM must correct the DEIS and recirculate for public comment and review.

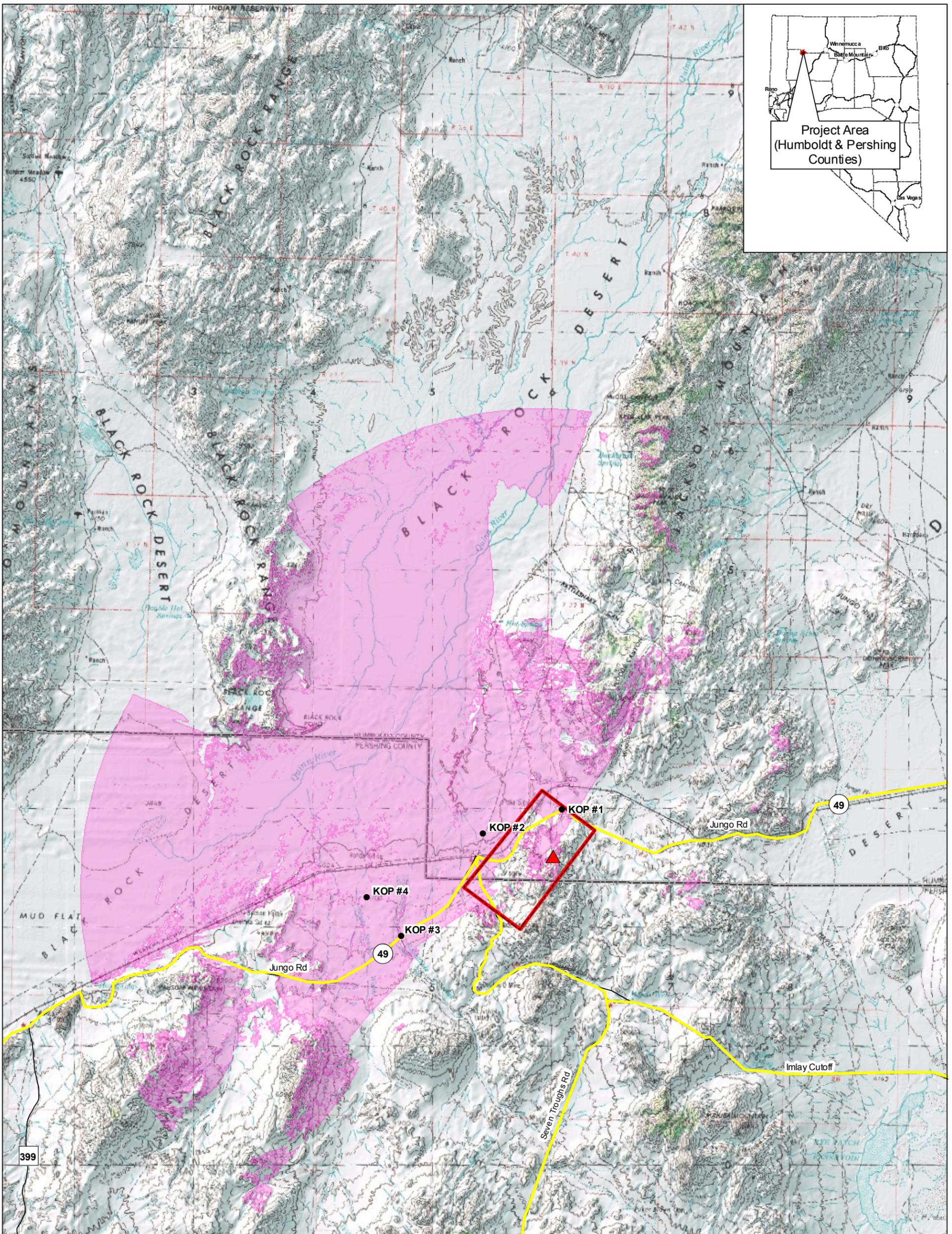
All in all, the Tribe requests additional participation to ensure our concerns are known.

Sincerely,

Handwritten signature of Billy A. Bell in black ink.

Billy A. Bell

Tribal Chairman



- Explanation**
- Proposed Project Area Boundary
 - ▲ Viewshed Point
 - Key Observation Point
 - 20-Mile Viewshed

Projection: UTM Zone 11 North, NAD83



WINNEMUCCA DISTRICT OFFICE
 Black Rock Field Office
 5100 East Winnemucca Blvd.
 Winnemucca, NV 89445



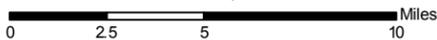
BUREAU OF LAND MANAGEMENT

HYCROFT EXPANSION PROJECT

Top of Hycroft Mine Viewshed and Key Observation Points

Figure 3.17.1

1:300,000



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11/28/2011