

3.0 Public Review of the Draft EIS

The 45-day public comment period on the Draft EIS began on June 1, 2012, and ended on July 16, 2012. The BLM received 33 comment letters including 132 comments during the public comment period. **Table 3-1** lists each of the comment letters by respondent, the assigned letter number, and the number of comments per letter.

The BLM held three public meetings on the Draft EIS. The first public meeting occurred at the BLM Battle Mountain District Office in Battle Mountain, Nevada, on June 26, 2012. Three persons signed the attendance record for the public meeting. An additional public meeting was held at the Elko District Office in Elko, Nevada on June 27, 2012. Twelve persons signed the attendance record for the public meeting. A third public meeting was held in Owyhee, Nevada on July 11, 2012; 19 persons signed the attendance record for the public meeting. The meetings in Battle Mountain and Elko were held in an informal open-house format. The meeting in Owyhee at the Human Development Center was conducted more formally with presentations provided by the BLM, RCG, and Terry Gibson, Tribal Chairman of the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation. A summary of the Owyhee public meeting notes is provided in **Appendix B**.

Table 3-1 Summary Table of Public Comment Letters

Letter Number	Commenter	Date of BLM Receipt	Number of Comments
Federal Agencies			
F1	Kristine Hansen, Department of the Army U.S. Army Corps of Engineers	6/12/2012	1
F2	Jared Blumenfeld, U.S. Environmental Protection Agency, Region IX	7/16/2012	35
F Letter Total			36
Nevada State Agencies			
S1	Skip Canfield, Nevada Division of State Lands	7/3/2012	4
S2	Alexi Lanza, Permits Branch, Bureau of Water Pollution Control	6/18/2012	1
S3	Monica Grammenos, Nevada Division of Water Resources	6/18/2012	2
S4	Rebecca Palmer, State Historic Preservation Office	6/20/2012	2
S5	Alan Coyner, Nevada Division of Minerals	7/12/2012	1
S6	John Ellison, Nevada State Assembly	7/14/2012	3
S Letter Total			13
Tribal and Band Governments			
TB1	Buster Gibson, Vice Chairman Shoshone-Paiute Tribes of the Duck Valley Indian Reservation	7/16/2012	17
TB2	Gerald Temoke, Chairman, and Doyle Tybo, Council Member, Elko Band Council	7/16/2012	3
TB Letter Total			20

Table 3-1 Summary Table of Public Comment Letters

Letter Number	Commenter	Date of BLM Receipt	Number of Comments
Non-government Organizations			
N1	Laura Skaer, Northwest Mining Association	7/2/2012	8
N2	Clynn Cook, NV Energy	7/12/2012	2
N3	Ray Bacon, Nevada Manufacturers Association	7/16/2012	3
N4	John Hadder, Great Basin Resource Watch	7/16/2012	9
N Letter Total			22
Tribal Organizations			
TO1	Felix Ike, Western Shoshone Descendants of Big Smoky	7/16/2012	2
TO2	Ilene Premo, Western Shoshone Committee	7/16/2012	3
TO Letter Total			5
Private Individuals			
P1	Jessica Spiegel	6/28/2012	1
P2	Arlene Lunen	6/26/2012	3
P3	John Carpenter (provided at Elko meeting)	6/27/2012	3
P4	Dale Lunen	6/26/2012	2
P5	Ronda Bachtell	7/15/2012	1
P6	Mike Ray	7/14/2012	1
P7	Amy Nelson	7/14/2012	3
P8	Lee Bosch	7/16/2012	1
P9	Annette White	7/16/2012	1
P10	Katrina Maczen Cantrell	7/16/2012	6
P11	Katrina Maczen Cantrell	7/16/2012	1
P12	E. Saldivar	7/14/2012	1
P13	Tim Janke	7/14/2012	1
P14	K. Jeffrey	7/15/2012	1
P15	B. Keith Byer	7/15/2012	4
P16	Jonathan Price	7/16/2012	1
P17	Cindy Premo	7/16/2012	5
P Letter Total			36
Total Comments Received			132

Comments received during the public comment period are presented on the following pages, together with the BLM's responses to these comments. Each comment and each response is identified by the letter number and a comment number. Each letter has been reviewed in its entirety and considered by the BLM in preparation of the Final EIS for the Project.

Letter F1



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

June 12, 2012

Regulatory Division (SPK-2003-25109)

Bureau of Land Management
Hollister Underground Mine Project
Janice Stadelman, Project Manager
3900 Idaho Street, Elko, Nevada 89801

Dear Ms. Stadelman:

We are responding to your request for comments on the Hollister Underground Mine project. The project is located in or near Little Antelope Creek, Section 16, Township 37 North, Range 48 East, Mount Diablo Meridian, Latitude 41.0841°, Longitude -116.5584°, north of Carlin, Elko County, Nevada.

The U.S. Army Corps of Engineers' jurisdiction within the study area is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, perennial or intermittent streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work.

To ascertain the extent of waters on the project site, the Rodeo Creek Gold Incorporated (RCG) should prepare an updated wetland delineation, in accordance with the *Minimum Standards for Acceptance of Preliminary Wetlands Delineations*, (which can be found on our web page at: <http://www.spk.usace.army.mil/Missions/Regulatory/Jurisdiction/WetlandDelineations.aspx> and clicking on Minimum Standards for Acceptance) and submit it to this office for re-verification.

Please refer to identification number SPK-2003-25109 in any correspondence concerning this project with this office. If you have any questions, please contact me at our Reno Regulatory Field Office, 300 Booth Street, Room 3050, Reno, Nevada 89509, telephone 775-784-5307, or email Kristine.S.Hansen@usace.army.mil. For more information regarding our program, please visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Kristine S. Hansen
Senior Project Manager, Reno Field Office

Letter F1 Response

F1-1 Comment noted. An updated wetland delineation was performed during the summer 2012 (AMEC 2012). In September 2012, the report was submitted to the USACE. A summary of the report is included in the FEIS.

Letter F2



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

JUL 16 2012

OFFICE OF THE
REGIONAL ADMINISTRATOR

Amy Lueders
Bureau of Land Management
1340 Financial Boulevard
Reno, Nevada 89520

Subject: Hollister Underground Mine Project Draft Environmental Impact Statement, Elko County, Nevada [CEQ # 20120166]

Dear Ms. Lueders:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500 - 1508, and our review authority under Section 309 of the Clean Air Act, as well as the May 21, 2008 Memorandum of Understanding between the Bureau of Land Management (BLM) and EPA.

According to the Draft EIS, the Hollister Underground Mine Project, proposed by Rodeo Creek Gold Inc. (RCG), would disturb 177 acres of land in addition to the 105 acres already disturbed by mining and exploratory activities on the site, and would have an active mine life of approximately 20 years. The proposed project would include the transition from exploration and bulk sampling activities to full-scale production of gold and silver in the existing underground workings and the proposed Hatter production shaft; the construction of an 11.6 mile electrical power transmission line; the installation of a National Pollution Discharge Elimination System (NPDES) permitted outfall for the discharge of dewatering waters; and the placement of waste rock on existing storage facilities as backfill into the underground workings and as partial backfill of the existing West Pit.

Based on the information presented in the Draft EIS, EPA believes that some aspects of the project could result in significant degradation of groundwater and surface water quality, including impairment of water quality in jurisdictional Waters of the United States. The Draft EIS states that, following closure of the mine, the rebounding groundwater table would interact with the mine's backfilled underground workings, producing groundwater contamination expected to exceed Nevada Department of Environmental Protection Profile 1 water quality standards for pH (alkaline), aluminum, antimony, chromium, selenium, sulfate, thallium, and total dissolved solids. Should this contaminated groundwater feed surface water features in the project area or impair adjacent groundwater aquifers, which then source surface waters, surface water quality would be further impaired. In addition, the proposed project is anticipated to result in increased flow of an existing contaminated discharge into Little Antelope Creek at seep MA-

Letter F2 Responses

- F2-1 Comment noted. Modeling results provided in the DEIS indicate that concentrations of groundwater constituents predicted to exceed groundwater quality standards within the refilled mine workings would eventually flow in the Vinini regional aquifer toward the southwestern Project boundary and attenuate to levels at or below groundwater quality standards within approximately 1.5 miles downgradient of the refilled Hollister Mine underground workings. No receptors (e.g., wells, springs, streams) of groundwater from the Ordovician Vinini aquifer have been identified downgradient of the Hollister Site. Groundwater in the Vinini aquifer at the Hollister Site was 150 to 400 feet lower in elevation than groundwater in the overlying Tertiary volcanic formations prior to any groundwater removal at the Hollister Site. Therefore, water in the two aquifers would not mix. Monitoring and mitigation would be required. See Appendix C, Monitoring and Mitigation Plan. No change to the text of the FEIS has been made to address this comment.
- F2-2 Comment noted. Based on both hydraulic and geochemical evidence, groundwater does not flow from the West Pit area toward the MA-1 seep. The underground mine water and groundwater in the Vinini Formation do not interact with Seep MA-1. The Final Monitoring and Mitigation Plan in Appendix C describes the monitoring that would be conducted for Seep MA-1 and Little Antelope Creek. No change to the text of the FEIS has been made to address this comment.

F2-1

F2-2

Letter F2 Continued

- F2-2 (Cont) 1. This unpermitted discharge into a Water of the United States exceeds NDEP Profile 1 water quality standards for sulfate and total dissolved solids, as well as being elevated in arsenic.
- F2-3 EPA believes that following closure of the proposed Hollister Underground Mine, long-term post-closure monitoring and mitigation may be necessary to ensure that the environmental contamination discussed above is limited and water quality standards are met. Based upon experience with other hardrock mines, EPA believes that an appropriate post-closure management strategy may require source controls such as a pump-and-treat system in order to maintain an inflow condition for groundwater into the closed underground workings. The Draft EIS, however, does not contain discussion of long term maintenance and management activities at the site, nor does it provide any projection or estimation of costs for post-closure obligations on the operator. Without this information, EPA is unable to fully assess the potentially significant environmental impacts of the proposed project and whether the project might result in a long term financial liability to the federal government and the American tax payer in the future, e.g., under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- F2-4 EPA has rated the Hollister Underground Mine Project Draft EIS as “EO-3 – Environmental Objections - Inadequate Information” (see Enclosure 1: “Summary of Rating Definitions”). The basis for this rating is summarized below. Our detailed comments on the Draft EIS are enclosed (Enclosure 2).
- F2-5 Our objections to the proposed project are based on the likelihood that groundwater and surface water resources would be significantly and adversely affected by the proposed project. The monitoring and mitigation measures proposed in the Draft EIS do not provide sufficient assurance that the potential impacts can or will be mitigated. While the Draft EIS contains a discussion of monitoring efforts as a component of the proposed project, it lacks a detailed discussion of potential mitigating actions in the event that contamination is observed. Without the development of a long term mitigation and management strategy, the proposed project has the potential to result in further exceedance of surface water quality standards.
- F2-6 The Draft EIS is inadequate because it does not disclose information regarding the post-closure operations, long term maintenance, or cost estimates. Nor does the Draft EIS discuss how the BLM will ensure that funds will be available as long as they are needed to implement post-closure obligations, including long term treatment and other mitigation measures. The availability of adequate resources to ensure effective reclamation, closure, and post-closure management is a critical factor in determining the significance of the project's potential impacts and its environmental acceptability.
- F2-7 We appreciate the time and effort that you and your staff have devoted to discussing, with EPA, the important larger issues of financial assurance for mining on federal lands. We look forward to informing the national interagency dialogue on this subject in the near future. In the meantime, EPA continues to believe that the adequacy of financial assurance is a critical element to be disclosed during the NEPA process. We believe such disclosure is consistent with CEQ’s guidance, which states that all relevant, reasonable mitigation measures that could improve the project are to be identified in an EIS and, to ensure that environmental effects of a proposed

Letter F2 Responses Continued

- F2-3 Comment noted. Modeling results provided in the DEIS indicate that concentrations of groundwater constituents predicted to exceed groundwater quality standards within the refilled mine workings would attenuate to levels at or below groundwater quality standards within approximately 1.5 miles downgradient of the refilled Hollister Mine underground workings. No receptors (e.g., wells, springs, streams) of groundwater from the Ordovician Vinini regional aquifer have been identified downgradient of the Hollister Site. The aquifer water level relationship provides evidence that groundwater from the Vinini regional aquifer would not affect water quality in overlying aquifer units within or near the Project area. See the Monitoring and Mitigation Plan (Appendix C).
- Pump and treat would be ineffective because the underground workings would continuously refill with water. It also would be impractical to pump and treat for 130 years and not feasible for 400 years. Groundwater quality degradation would be limited to the mine workings within the Project boundaries. No change to the text of the FEIS has been made to address this comment.
- F2-4 Comment noted. It is not the BLM’s policy to include estimated costs of reclamation or long-term maintenance in National Environmental Policy Act (NEPA) documents. Information on the reclamation cost estimate (RCE) and/or the financial guarantee amount, while public information, is not included in the environmental analysis nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operation but are part of the BLM’s enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012; page 4-37 [BLM 2012a]). Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer, in accordance with the 43 CFR 3809 regulations, has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust.
- In accordance with 43 CFR 3809.401(d), the BLM requests a reclamation cost estimate only after processing a complete Plan of Operations or amendment. The BLM recognizes that substantial changes may be made to a proposed Plan of Operations during the NEPA review and analysis process. The BLM establishes trust funds where necessary. The BLM is prohibited from establishing trust funds based on speculative reasons (e.g., the possibility that groundwater may be contaminated if there is no expectation or analysis that

Letter F2 Responses Continued

- F2-4 (Cont) groundwater would be contaminated). The BLM policy as stated in the H-3809-1 Surface Management Handbook dated 9/17/2012 (BLM 2012a); page 4-37 and as supported by the Surface Management regulations (43 CFR 3809), does not support the placement of the following information into an environmental impact analysis: 1) RCE calculations, 2) financial guarantee amount, 3) long-term funding mechanism (LTFM) calculations, and 4) LTFM agreements. The BLM does not include reclamation costs in the NEPA process because NEPA requires the agency to analyze potential environmental impacts from a proposed federal action. The reclamation/financial guarantee estimates and LTFMs are a financial assurance should the operator fail to comply with the reclamation requirements and long term maintenance when identified by the BLM Authorized Officer. These estimates are not part of this environmental analysis. No change to the text of the FEIS has been made to address this comment.
- F2-5 Comment noted. The DEIS did not identify any surface water quality impacts resulting from the Project. The Final Monitoring and Mitigation Plan is included in Appendix C of the FEIS. No change to the text of the FEIS has been made to address this comment.
- F2-6 Comment noted. It is not the BLM's policy to include estimated costs of reclamation or long-term maintenance in NEPA documents. Information on the RCE and/or the financial guarantee amount, while public information, is not included in the environmental analysis nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operations but are part of the BLM's enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012 [BLM 2012a]). Possible reclamation and closure techniques are presented in the DEIS to allow for review and comment on their adequacy. However, technologies change with advances in science and by incorporating knowledge gained from reviewing successes and failures of mines currently in closure. The intent is to allow enough flexibility to accommodate advances in technology expected to occur prior to mine closure in 20 years. Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer, in accordance with the 43 CFR 3809 regulations, has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. The BLM routinely reviews the reclamation cost estimate and bond during the life of the Project. The BLM Authorized Officer can require a long-term

Letter F2 Continued

F2-7 (Cont) action are fairly assessed; the probability of the mitigation measures being implemented should also be discussed.¹ We also believe that recent CEQ guidance concerning mitigation may be relevant; this guidance views a discussion of funding for implementation of mitigation commitments as critical to ensuring informed decision making, and suggests that agencies should not commit to mitigation measures if it is not reasonable to foresee the availability of sufficient resources to ensure the performance of the mitigation.²

F2-8 We recommend that BLM disclose an estimate of funding for the reclamation and the closure bond, as well as for the long-term funding mechanism for the proposed Hollister Underground Mine project; analyze the adequacy of the funding amount and mechanism, including associated uncertainties to ensure that sufficient funds would be available as long as they are needed; analyze and revise the discussion of potential impacts to, and mitigation measures associated with, water resources, including their anticipated effectiveness; and prepare more detailed monitoring and mitigation plans with established contingencies in the event that the project proponent is no longer financially capable of implementing essential mitigation measures. This information should be circulated in a Supplemental Draft EIS for public comment, in accordance with NEPA and CEQ's NEPA Implementation Regulations. EPA respectfully requests the opportunity to review this information and provide BLM our feedback before you publish the Supplemental Draft EIS.

F2-9 We appreciate the opportunity to review this Draft EIS and look forward to working with BLM to resolve the issues outlined in this letter. We will call to arrange a meeting with you to discuss plans for completing the NEPA process. In the meantime, if you have any questions, please call me at (415) 947-4238 or have your staff contact Carter Jessop, our lead NEPA reviewer for this project, at (415) 972-3815. Please send a copy of the Supplemental Draft EIS to this office (mail code CED-2) at the same time it is filed with our Washington, D.C. office.

Sincerely,


Jared Blumenfeld
Regional Administrator

Enclosures:

- (1) Summary of Rating Definitions
- (2) EPA's detailed comments on the Hollister Underground Mine Draft EIS

cc: Ken Miller, BLM Elko District Office
Janice Stadleman, BLM Elko District Office
Colleen Cripps, Nevada Division of Environmental Protection
Alan Jenne, Nevada Division of Wildlife

¹ CEQ, Memorandum for Federal NEPA Liaisons, Federal, State and Local Officials and Other Persons Involved in the NEPA Process, Question 19b, March 16, 1981.

² CEQ, *Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact*. 76 Fed. Reg. 3843, 3848-3849 (Jan. 21, 2011).

Letter F2 Responses Continued

F2-6 (Cont) trust be established to address a specified need. Under the 43 CFR 3809 regulations, there is no limitation on the time-frame for the BLM to require monitoring, maintenance, or treatment of facilities at a mine site. No change to the text of the FEIS has been made to address this comment.

A detailed Monitoring and Mitigation Plan is included in Appendix C.

F2-7 Comment noted. The referenced Council on Environmental Quality (CEQ) guidance is applicable to Environmental Assessments, not EISs. The CEQ issued this guidance to ensure that the mitigation actions required to reach a Finding of No Significant Impact in a so-called "mitigated Finding of No Significant Impact (FONSI)" were adequately monitored post-Project approval. The BLM analyzed potential impacts in an EIS because we could not issue a FONSI and we are not relying on mitigation in order to issue a FONSI for the Project. Therefore the referenced CEQ guidance is inapplicable.

In addition, DEIS analyzes the cumulative impacts resulting from the Proposed Action on the environment. Monitoring and mitigation is developed to reduce or eliminate impacts where applicable and feasible. The DEIS discloses when impacts may occur that cannot be mitigated. The DEIS describes when funding for monitoring and mitigation may be utilized. See the Final Monitoring and Mitigation Plan located in Appendix C of the FEIS.

No change to the text of the FEIS has been made to address this comment.

F2-8 Comment noted. The USEPA refers to reclamation bonds and long-term funding mechanisms as "mitigation funds." These funding mechanisms are provided under the BLM's financial guarantee requirements and enforcement program as identified in the 43 CFR 3809 Surface Management regulations and H-3809-1 Surface Management Handbook dated 9/17/2012 (BLM 2012a). Therefore, reclamation bonds and long-term funding mechanisms are not "mitigation funds." The BLM requires and/or applies "mitigation" as defined by the CEQ in 40 CFR 1508.20. CEQ's definition of mitigation does not characterize reclamation bonds or long-term funding mechanisms as "mitigation." The BLM does not agree with USEPA's assertion that the reclamation bond is mitigation. Therefore, in accordance with the BLM policy, the BLM will not be placing this information in the FEIS. Any long term requirements, including the operator's potential long-term liability, will be addressed through the BLM's regulatory authorities as specified in 43 CFR 3809.552(c), the BLM Manual MS-3809 (BLM 2012b) and

Letter F2 Continued

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*.

Letter F2 Responses Continued

- F2-8 (Cont) the 3809 Surface Management Handbook H-3809-1 (BLM 2012a). For a discussion of monitoring, mitigation, and effectiveness see DEIS Sections 3.5.4 and 3.6.4, and the Monitoring and Mitigation Plan in Appendix C.
- F2-9 Comment noted. The BLM has determined that the DEIS was prepared in accordance with the CEQ's regulations, and therefore preparing a supplemental DEIS is not required.

Letter F2 Continued

Hollister Underground Mine Project Draft Environmental Impact Statement EPA Detailed Comments – July 16, 2012

Water Quality and Waters of the United States

Geochemical and groundwater modeling

According to the Draft EIS, in the first 130 years following closure of the Hollister Underground mine site, the rebounding groundwater table would interact with the mine's backfilled underground workings, resulting in significant groundwater contamination within the mine pool. Groundwater would exceed Nevada Department of Environmental Protection (NDEP) Profile 1 water quality standards for pH (basic), aluminum, antimony, chromium, selenium, sulfate, thallium, and total dissolved solids (p. 3.5-35). Following the period of inflow, this initial mine volume of groundwater is projected to migrate down gradient southwest of the mine site. Approximately 400 years after closure of the Hollister Underground Mine, the peak of this contaminated plume is projected to reach the proposed project boundary. According to the Draft EIS, a three dimensional dispersal modeling indicates that dilution, dispersal, attenuation, and other geochemical processes will result in reductions of contaminant concentrations such that only antimony would exceed NDEP Profile 1 values at this point of compliance (Brown and Caldwell, 2012). Based upon this result, the Draft EIS concludes that the contamination of groundwater resources resulting from the proposed project represents no risk to wildlife or human uses and requires no mitigating action.

Geochemical modeling typically encounters a number of uncertainties. With the exception of recognizing uncertainty related to the surface area of waste rock in the underground workings that are likely to be exposed to groundwater, the Draft EIS does not identify or discuss the uncertainties associated with the geochemical modeling for this project. A discussion of the range of potential impacts that could be associated with the modeling results is needed so appropriate closure and post-closure management plans can be developed and committed to now, before the project begins.

One method to assess overall uncertainty or error is to propagate Monte Carlo-generated analytical uncertainties through a geochemical code, and generate probabilistic distributions of the output. A generalized Sensitivity Analysis (GSA) can also be used to separate the model responses into two classes or groups based on specified performance criteria. The relative contribution of the uncertainty associated with each input parameter to the output uncertainty is determined by comparing the cumulative distribution functions of the parameters in the two classes. The combined use of the Monte Carlo method with GSA can be used to examine the significance of analytical and thermodynamic uncertainties.

Recommendation: The geochemical modeling used in the mine pool predictions of groundwater quality should include a Monte Carlo or similar type sensitivity analysis of a full-range of potential inputs and outcomes. The Supplemental Draft EIS should identify and thoroughly discuss the uncertainties in the geochemical modeling and the range of potential impacts to groundwater quality.

F2-10

Letter F2 Responses Continued

F2-10 Comment noted. The PHREEQC geochemical model assumptions and calculations are clearly identified in Appendix B3, Geochemical Model Report, of the DEIS. The range of potential impacts was sufficiently addressed by modeling two scenarios for mine wall rock and waste rock surface area, 5.411 m²/L and 54.11 m²/L, a 10-fold difference as explained in Appendix B3. Uncertainties with respect to the geochemical modeling are adequately discussed in the geochemical modeling report (DEIS, Appendix B3), including the effects related to the presence of inorganic carbon in the regional aquifer. The geochemical modeling report identifies the numerous elements of conservatism that are included in the model. It is not reasonable to identify all uncertainties. As stated in the DEIS, the model would be updated with new information as the Project progresses.

The 10-fold range in surface areas modeled for estimating the chemistry of mine water at steady state covers the range of possible inputs for Monte Carlo simulation. There would be no analytical advantage to adding the time and cost for Monte Carlo simulations. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

Impacts resulting from contamination of the Vinini formation aquifer

EPA is concerned that historic and proposed mining and exploration activities may have already jeopardized the integrity of the clay barrier or aquitard that previously prevented movement of water between the Vinini formation aquifer, the volcanic aquifer above it, and the shallow perched aquifer underlying the existing open pit areas. Should groundwater move between the various aquifers at the site, Vinini formation groundwater would introduce high levels of contamination to the other aquifers, which would likely then convey this contamination into seeps, springs and surface water bodies.

F2-11

Recommendation: The Supplemental Draft EIS should discuss how the proponent will ensure there is no flow between the contaminated Vinini aquifer in the project area and the groundwater aquifers above it despite the numerous locations where the clay aquitard has been pierced.

Contaminated groundwater from the mine pool has the potential to enter seeps, springs and creeks if they receive flow contributions from the Vinini aquifer or if Vinini aquifer waters contaminate an overlying groundwater body that contributes to surface flows. According to Section 3.6, lower reaches of Little Antelope Creek are believed to gain groundwater baseflow contributions through the summer months during years of average or above average precipitation (p. 3.6-8). Although the aquifer that contributes these base flows is apparently unknown, should these flows be contributed by the Vinini aquifer or an aquifer contaminated due to mixing with Vinini formation waters adjacent to the project site, Little Antelope Creek and/or the Rock Creek watershed may have reduced water quality. Likewise, should Vinini formation groundwater overflow the mine portal, conveyance of contaminated groundwater into surface waters adjacent to the project site is likely. In conversations with EPA staff, BLM staff has characterized this as a “worst case scenario”. Given the site specific conditions at the Hollister Underground Mine and the complex groundwater interactions that may take place, EPA believes that such a release of contaminants is a foreseeable possibility.

F2-12

Recommendation: The Supplemental Draft EIS should provide plans for responding to each of the potential sources of water quality contamination from the proposed project, including:

- Interim (emergency) Response Plan
- Fluid Stabilization and Management Plan
- Closure Water Management and Treatment Plan
- Post-Closure Water Management and Treatment Plan

The response plans should address the proposed mitigation measures and provide contingency plans in the event that mitigation fails to be fully effective. The response plans should include monitoring plans that address continual calibration of the information using real-time site specific data. This should include: a trend analysis and additional monitoring to provide assumption and/or model feedback prior to any actual exceedance occurring; monitoring of mine pool and monitoring wells located between mine pool and point of compliance well; and monitoring of waste rock storage facility seepage collected in wet well to measure dolomite neutralization effectiveness. The

Letter F2 Responses Continued

F2-11 Comment noted. Groundwater in the Vinini Formation currently does not flow up into adjacent formations in the Project area due to the alteration of the overlying volcanic units as explained in Section 3.5, Groundwater Resources and Geochemistry, of the DEIS. Groundwater removal from the Vinini Formation is creating a downward gradient as water descends to fill the void. Outside the Project area, communication between aquifers, should it exist, does not pose a water quality issue.

Proper well abandonment is employed to ensure that water within the Tertiary volcanic rock hosted aquifer does not flow downward through piercements in the clay aquitard. The Nevada Administrative Code (NAC) 534.4371 Regulations administered by the Nevada Division of Water Resources describes the hole plugging requirements. No change to the text of the FEIS has been made to address this comment.

F2-12 Comment noted. Degradation of water quality in the Vinini Formation would be limited to the project area, as discussed in (DEIS, Section 3.5, pages 3.5-34 through 37). There is no demonstrated connection between Vinini groundwater and surface water features within the project area. The baseline groundwater elevation before groundwater pumping began was below the mine portal elevation. Therefore, it is not possible for water from the mine workings to flow out through the mine portal.

Seeps, springs and creeks do not receive flow contributions from the Vinini aquifer at any location downgradient of the proposed Hollister Mine. Groundwater from the Vinini aquifer cannot flow upwards into the overlying Tertiary volcanic-hosted aquifer. The Tertiary volcanic rock units overlying the Vinini Formation are several hundred feet thick (DEIS, Section 3.5.1.1). Any base flow that may occur along Little Antelope Creek is contributed by one of several volcanic rock units in this area, not by the Vinini aquifer. Rock Creek is 7 miles downgradient of the proposed Hollister Mine, far beyond the 1.5-mile-diameter modeled extent of Vinini aquifer contamination, and is underlain by extensive Tertiary volcanic rock units. The water level elevation in the Vinini aquifer prior to any groundwater removal was approximately 150 feet below the mine portal; there are no plausible mechanisms for the groundwater elevation in the Vinini regional aquifer to overflow the mine portal. The site-specific conditions at the proposed Hollister Mine are mis-characterized in this comment, and release of contaminants is not a foreseeable possibility.

The Final Monitoring and Mitigation Plan identified in Appendix C addresses water quality issues. Table 1-1 and Appendix A (DEIS, Section 1.3) further identify required state permits relevant to this

Letter F2 Continued

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Cont

monitoring plans should provide performance standards upon which to base mitigation triggers that would ensure prevention (e.g. prior detection and mitigation) of any exceedance at either a point of compliance or NPDES discharge location.

Potential for waste rock seepage

The proposed project includes the placement of a wet well/sump under the waste rock storage facilities (WRSF) with water collecting at the synthetic liner underlying the waste rock, to be pumped to water treatment facilities prior to discharge. The leachate data from the active WRSF represents the best opportunity for a direct site analog relative to the existing and proposed material handling mitigation measures (e.g. amendment with dolomite). Site analogs provide site-specific real-time data that can be more accurate in predicting water quality impacts than conceptual modeling based on limited data. Infiltration that has made its way through the existing WRSF and, subsequently, through the dolomite layer and collected in the sump should be representative of future leachate volumes and concentrations from the existing and new WRSF, and indicative of whether treatment will be required. The Draft EIS indicates that, because sump water is presently being sent to the reverse osmosis plant, it has required treatment for contaminants in the past. The Draft EIS contains no information, however, in regards to the water quality of this leachate.

F2-13

Recommendation: The Supplemental Draft EIS should include water quality and quantity data for the leachate collecting at the synthetic liner under the existing WRSF. It should include a discussion of whether the data supports the laboratory results used in the preparation of the Draft EIS and the potential environmental consequences of any identified discrepancy.

Impacts resulting from discharge at seep MA-1

Sections 3.4 and 3.6 of the Draft EIS provide descriptions of seep MA-1, which discharges into Little Antelope Creek from the Newmont-reclaimed East Waste Rock Storage Facility. Seep MA-1 currently contains elevated levels of arsenic, sulfate, and total dissolved solids (TDS), with sulfate and TDS being above NDEP Profile 1 reference values. Based upon the information presented in the Draft EIS, it seems likely that seep MA-1 receives contributions from the shallow perched aquifer under the previously disturbed operations areas. Under the proposed action, development of the West Pit WRSF and placement of backfill would raise the ground surface in the West Pit and preclude the continued formation of the seasonal pit lake that has in the past occurred approximately 9 months of each year. The removal of this groundwater sink for the perched aquifer is projected to result in an increase in flow of the perched aquifer toward Little Antelope Creek of 1.8 gallons per minute (p. 3.5-37). This increase in movement in the perched aquifer may then result in an increase in flow at seep MA-1 or the development of a new seep along the margin of Little Antelope Creek.

In addition, the existing unnamed seep out of the Newmont-reclaimed South WRSF just downstream from seep MA-1 is stated to similarly contain elevated levels of sulfate and TDS. The Draft EIS indicates that Newmont's passive water treatment system and constructed wetland

Letter F2 Responses Continued

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(Cont)

issue. In addition, the comment appears to misunderstand the facilities included in the Proposed Action. The enumerated "plans" dealing with "fluid stabilization" and "water management" are prepared for processing facilities such as tailing storage. No processing facilities are proposed as part of the Proposed Action and therefore, would not conduct any processing in the Project area.

All plans required by law are currently in place or would be obtained by the operator.

The monitoring measures suggested by the comment are standard procedures under RCG's Nevada Division of Environmental Protection (NDEP)-issued water pollution control permit. The model would continue to be updated with real time data, as this is also the current, standard practice. There is no "mine pool." Waste rock storage facility (WRSF) "seepage" if any, is collected under the lined WRSF and is treated in existing treatment facilities. No change to the text of the FEIS has been made to address this comment.

F2-13

Comment noted. The existing WRSF is managed according to NDEP water pollution control permit (WPCP) #NEV-2003107. Pursuant to the permit requirements, fluid volumes and Profile 1 water quality parameters are reported to NDEP quarterly. Analyzed data, including humidity cell and ABA testing, predicted acid-generation potential which agrees with the results for this leachate. Therefore, there is no discrepancy and no potential environmental consequences. No change to the text of the FEIS has been made to address this comment (see DEIS, Section 2.2.5, Waste Rock Management).

Letter F2 Continued

at this location has been insufficient at preventing continued contributions of contaminated water to Little Antelope Creek.

RCG proposes to continue to monitor water quality at the MA-1 seep and Little Antelope Creek to determine whether backfill of the West Pit does, in fact, result in changes to water quality and quantity at the MA-1 seep. This information would be utilized to refine the model and to determine whether or not the proposed Hollister Mine is affecting this seep. If the Hollister project is determined to be contributing to flows at seep MA-1, the Draft EIS proposes the construction of an artificial wetland to mitigate for this contamination.

F2-14

Recommendation: In light of the failure of the existing constructed wetland to prevent seep from Newmont’s South WRSF from entering Little Antelope Creek, the basis for proposing construction of another artificial wetland as mitigation for impacts of the proposed project is unclear. EPA recommends that the Supplemental Draft EIS include a more thorough discussion of how flows from seep MA-1 would be controlled and prevented from further contaminating Little Antelope Creek, including an assessment of the likely effectiveness of proposed mitigation measures. Furthermore, the Draft EIS does not indicate whether the development of the West Pit WRSF has the potential to increase flow at the unnamed Newmont South WRSF seep as well. In light of the similarities in water quality data and the indicated movement direction of the perched aquifer toward both of these seeps, the Supplemental Draft EIS should consider this possibility and identify mitigation should reductions in water quality or increases in flow at this location occur.

The Clean Water Act prohibits the discharge of any pollutant through a point source into a water of the United States without a National Pollutant Discharge Elimination System (NPDES) permit. Little Antelope Creek has been identified as a jurisdictional water of the United States by the U.S. Army Corps of Engineers. Seep MA-1 and the unnamed seep exiting Newmont’s South WRSF appear to be discharging into Little Antelope Creek without an NPDES permit, and the Draft EIS does not indicate that a NPDES permit will be obtained for these discharges.

F2-15

Recommendation: EPA recommends the Supplemental Draft EIS accurately characterize these seeps as unpermitted discharge and provide a description of ongoing and proposed mitigation efforts to either eliminate the seep or to obtain NPDES permit coverage.

Jurisdictional Delineation

According to the Draft EIS, (p. 3.6-2), “The U.S. Army Corps of Engineers (USACE) formally determined that Little Antelope Creek and tributary features in the project area are jurisdictional waters of the U.S. (USACE 2004). That determination was valid through April 2009...” Furthermore, “According to earlier field surveys in the project area, approximately 2.43 acres of waters of the U.S. occur along Little Antelope Creek, and approximately 1.01 acres of wetlands occur along this creek (JBR 2003a).” Jurisdictional determinations require re-verification after 5 years have elapsed; however, the USACE in Reno, Nevada indicate that they have not been contacted for re-verification for the Hollister Project.

Letter F2 Responses Continued

F2-14 Comment noted. The elevated chemical constituents from MA-1 seep are the result of historical mining operations from another operator. The DEIS identified that filling the West Pit with waste rock potentially could increase flow with elevated total dissolved solids (TDS) and sulfate in the perched aquifer towards Little Antelope Creek of up to 1.8 gallons per minute (gpm). There is no evidence that the MA-1 seep is contaminating Little Antelope Creek. The flows from the MA-1 seep are minimal to non-existent. Based on field data, the seep is actually dry approximately 80 percent of the time and when flow is present, it is so minor that it rarely, if ever, reaches Little Antelope Creek. Monitoring of flow and water quality in MA-1 seep and Little Antelope Creek, and potential mitigation measures should monitoring detect any impacts, are described in the Final Monitoring and Mitigation Plan as presented in Appendix C. A constructed wetland is one of several mitigation strategies that would be considered to address any water quality impacts. The existing constructed wetland was constructed and installed by another operator.

Lining and backfilling of the existing West Pit with waste rock potentially would increase total flow by up to 1.8 gpm. Exactly where this flow increase would be observed, if observed at all, is difficult to predict due to fracture control on groundwater flow. There is no evidence of any connection between the West Pit and the South WRSF seep. Geochemical evidence and hydraulic evidence indicate that the MA-1 seep is not connected hydraulically to groundwater underlying the West Pit (DEIS, Appendix B4). Given the location of the seep emanating from the South WRSF, it is even more unlikely that there is any connection between the West Pit and this seep. USEPA does not identify or characterize the “similarities” in water quality. Monitoring and mitigation is identified in Appendix C. No change to the text of the FEIS has been made to address this comment.

F2-15 Comment noted. These seeps are the result of historical mining operations by a previous operator. Further, such seeps are not an unpermitted discharge and it would be inaccurate to characterize them as such. Data from monitoring of seep MA-1 by RCG would be utilized to determine if the proposed Project is influencing seep MA-1. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

In addition, while the Draft EIS identifies Little Antelope Creek, Antelope Creek, Rock Creek, etc, as jurisdictional, none of their intermittent/ephemeral tributaries appear to be included as part of the estimate of potentially impacted waters. It appears that the jurisdictional status of these intermittent or ephemeral tributaries has not been determined.

Recommendations: The project proponent should contact the USACE office in Reno, Nevada to request a new jurisdictional determination to verify the amount of waters/wetlands within the entire (cumulative effects) project area.

F2-16

The Supplemental Draft EIS should report on the status of consultation with the USACE. It should provide the area and linear feet of jurisdictional intermittent/ephemeral tributaries within the project area in addition to the jurisdictional status of perennial waters and wetlands. Furthermore, if there are no discharges of dredged or fill material from the project into WUS, this should be clearly stated in the EIS.

Financial Assurance for Post-Closure Obligations

Need for a Long-Term Funding Mechanism

Based on the information presented in the Draft EIS, EPA believes that the Hollister Underground Mine Project will require long term management and treatment to prevent substantial post-closure environmental contamination. For example, a system to pump and treat Vinini aquifer water may be needed to maintain an inflow condition into the backfilled underground workings until the groundwater no longer exhibits contamination exceeding water quality standards. This would both prevent the propagation of a contaminated groundwater plume from the underground workings and eliminate the possibility of overflow of contaminated groundwater into surface waters.

In addition, water infiltrating through the WRSFs during mine operation would be pumped and treated to meet water quality standards before discharge into the Rapid Infiltration Basins south of the mine. The Draft EIS does not indicate whether pumping and treatment of WRSF seepage would be necessary after mine closure; however EPA believes that this is highly likely based on the information available. For example, there is no indication that WRSF seepage quality is likely to change after closure of the mine and the Draft EIS does not provide evidence that the proposed waste rock/soil cover to be placed over the WRSFs during closure of the mine would effectively prevent all meteoric water infiltration.

The Draft EIS does not contain discussion of financial assurance needed to ensure that the costs of long-term post-closure monitoring and management will be covered by the mine operator for as long as necessary to prevent groundwater and surface water contamination. Specifically, the Draft EIS does not estimate the costs of long-term monitoring and management, analyze the adequacy and uncertainties associated with these estimated costs, or describe or analyze options for long-term funding mechanisms (LTFM) to demonstrate that funding will be available to completely cover the costs of these activities.

Letter F2 Responses Continued

F2-16 Comment noted. The only Project discharge into waters of the U.S. would be the outfall of clean water into Little Antelope Creek, as discussed in Section 3.6.2.1, Surface Water Resources and Watersheds, Proposed Action (DEIS). RCG would obtain a NPDES discharge permit for this proposed discharge. The EIS analyzed potential cumulative impacts to surface waters for all of the three watersheds identified as the cumulative effects study area (CESA). An updated wetland delineation was performed during the summer of 2012 (AMEC 2012). The waters of the U.S. report for the Project area has been submitted to the USACE. The Project would not result in discharges of dredged or fill material from the Project into waters of the U.S. A summary of the waters of the U.S. report is included in the FEIS (Section 3.9.1, Addendum).

Letter F2 Continued

F2-17

Recommendation: The Supplemental Draft EIS should specify all of the necessary post-closure monitoring, operations and maintenance, and replacement activities at the Hollister Underground Mine; describe their performance standards and necessary timing; and include the cost estimates for these activities.

In order to prevent post closure groundwater and surface water contamination from the mine, the BLM should require the mine operator to establish a LTFM to cover the costs of monitoring as well as source controls and/or water treatment facilities after closure of the mine for as long as they will be needed.

The BLM should determine the appropriate level of funding for the Hollister Underground Mine LTFM and disclose the specific mechanism that will be established; analyze the adequacy of the funding amount and mechanism; and provide this information in the Supplemental Draft EIS.

While the actual construction of a trust may vary, the overall goal is to ensure that the trust has sufficient assets to cover the costs for which it was established, for as long as needed.

F2-18

Recommendations: We recommend BLM consider the following approaches to help ensure that the Hollister Underground Mine LTFM covers the costs of all necessary post-closure monitoring and operation and maintenance obligations for as long as they may be needed, which we believe may be at least several hundred years.

- **Consider the use of current value trusts or net present value (NPV) trusts with a standard benchmark discount rate** as opposed to an individually negotiated rate. Under the current value trust approach, the trust is fully funded immediately; whereas, under the NPV approach, cost estimates are calculated using a discount rate. Where NPV trusts are used, the single most important factor in calculating the beginning amount of the trust corpus (and therefore, the value of the trust in the future) is to use an appropriate discount rate. For example, EPA has authorized the 30-year Treasury Constant Maturity return for some trusts that allow for NPV. Overly aggressive discount rates “backload” contributions to the trust over time and limit true-up contributions.
- **Shift to annual true-up cycle.** BLM requires adjustments, or “true-ups”, to trust funds every three years if they are not meeting their growth performance goals. EPA supports the idea of a true-up requirement, but recommends that BLM consider using an annual true-up cycle rather than a 3-year cycle, to address both problematic investment performance and the risk of grantor bankruptcy or other corporate failure more often. Addressing either of these problems quickly (i.e., with a shorter true-up cycle) would ensure that the trust is better positioned to secure the appropriate funds based on performance goals.
- **Consider a more conservative investment portfolio requirement.** BLM imposes few limitations on the types of investments allowed for its trust funds. EPA generally imposes significant limitations on potential investments, especially when the trust is

Letter F2 Responses Continued

F2-17 Comment noted. It is not the BLM’s policy to include estimated costs of reclamation or long-term maintenance in NEPA documents. Information on the RCE and/or the financial guarantee amount, while public information, is not included in the environmental analysis nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operation but are part of the BLM’s enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012; page 4-37 [BLM 2012a]). Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer in accordance with the 43 CFR 3809 regulations has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. The BLM routinely reviews the reclamation cost estimate and bond during the life of the Project. If the need arises, the BLM Authorized Officer can determine that a long-term trust is needed and required, in which case a long-term trust would be established to address the specified need. Under the 43 CFR 3809 regulations, there is no limitation on the time-frame for the BLM to require monitoring, maintenance, or treatment of facilities at a mine site. The timeframe is indefinite or as long as it takes. No change to the text of the FEIS has been made to address this comment.

F2-18 See response to comment F2-17.

Letter F2 Continued

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Cont

an NPV trust. We acknowledge that there is a downside to conservative investment strategies (namely, that the grantor contribution would likely increase), but we believe, given the adverse consequences of a trust failure, potentially leading to liability for future taxpayers and/or unacceptable environmental impacts, a conservative approach may be appropriate.

Adaptive Management

EPA believes an adaptive management plan would be appropriate to address some of the water resource issues identified in the Draft EIS. For example, Vinini aquifer contamination may be greater than predicted, and neutralization of acid generating material may be less effective than predicted.

F2-19

Recommendations: Include, in the Supplemental Draft EIS, an adaptive management plan. The plan should consider potential failure modes and effects and ensure that contingency measures are identified and implementable in the event they become necessary. It should have a clear and detailed process linking monitoring with on-the-ground actions and agency enforcement.

Financial assurance for the project should include costs for undertaking tasks in the adaptive management plan should they become necessary. This cannot be accomplished by requiring financial assurance only after it becomes evident that a problem exists, because the operator may not be financially able to provide additional financial assurance at that time; rather, financial assurance should be required for those activities on a contingency basis.

Wastewater

The Draft EIS does not provide an adequate description of the existing and proposed sources of wastewater generated at the mine, nor of the wastewater treatment and ultimate disposal or re-use of wastewater. Additionally, the text appears to conflict with diagrams provided in the EIS. For example, the text on page 2-11 states “Any draindown water in the WRSF is collected and contained in wet well sumps and sent to water treatment facilities in the East Pit”; however the associated diagram (Figure 2-5 “Hollister Operation Water Management System) does not appear to include this source of water or treatment operation. The text on page 2-13 states that “water inflow” from the mine is sent to the East Pit water treatment facilities and is currently sent to the RIBs. However, Figure 2-5 indicates that “water inflow” from the proposed facility will not be treated prior to discharge to Little Antelope Creek. The Draft EIS does not specifically state that the “water inflow” from the proposed project will be treated. Figure 2-5 also does not include flow data or unit sizes for many of the operations, while several flow diagrams are apparently missing; for example, there is no indication of reverse osmosis brine disposal despite indication in the text that WRSF draindown would be treated via reverse osmosis.

F2-20

Recommendation: The Supplemental Draft EIS should provide a comprehensive description of each source of wastewater for the proposed project. Specifically, we

Letter F2 Responses Continued

F2-19 Comment noted. The 43 CFR 3809 regulations allow for amendments to the Plan of Operations to occur when necessary. The Final Monitoring and Mitigation Plan presented in Appendix C includes strategies to mitigate potential impacts based on the results of monitoring. An adaptive management plan is not warranted. According to the CEQ, the worst-case analysis was withdrawn from the NEPA by final rule issued at 51 Federal Register 15618 (April 25, 1986); textual errors corrected 51 Federal Register page 16846 (May 7, 1986). The preamble to this rule is published at ELR Administrative Material 35055, CEQ’s Forty Most Asked Questions Concerning CEQ’s NEPA Regulations, 46 Federal Register 18026 (March 23, 1981) as Amended.

It is not the BLM’s policy to include estimated costs of reclamation or long-term maintenance in NEPA documents. Information on the RCE and/or the financial guarantee amount, while public information, is not included in the environmental analysis; nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operation but are part of the BLM’s enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012; page 4-37 [BLM 2012a]). Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer in accordance with the 43 CFR 3809 regulations has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. The BLM routinely reviews the reclamation cost estimate and bond during the life of the Project. If the need arises, the BLM Authorized Officer can determine that a long-term trust is needed and required, in which case a long-term trust would be established to address the specified need. Under the 43 CFR 3809 regulations, there is no limitation on the time-frame for the BLM to require monitoring, maintenance, or treatment of facilities at a mine site; the timeframe is indefinite or as long as it takes. No change to the text of the FEIS has been made to address this comment.

F2-20 Comment noted. The Hollister EIS does not use the term “wastewater.” Wastewater will not be generated nor discharged by the proposed Project. Water management for the existing operations (No Action Alternative) is described in sufficient detail for the purposes of this EIS in Section 2.2.6, Water Management, in the DEIS. Seepage from the existing WRSF is collected in the lined wet well sump, sampled, and treated as described in Section 2.2.5, Waste Rock Management (DEIS).

Letter F2 Continued

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(Cont)

recommend revising Figure 2-5 (Water Handling Diagram) to include two separate diagrams; one for the existing inputs and one for the proposed inputs. The diagrams should include each source of wastewater, including WRSF drainage, stormwater, “water inflow”, and other sources of water at the mine site. The diagrams and text should clearly indicate projected flows, projected wastewater characteristics, intermediate treatment steps, design standards, and ultimate disposal or re-use. Additionally, the EIS should indicate the expected post-closure rates of surface runoff and seepage and how this water will continue to be treated.

According to 40 CFR 440.132, “mine drainage” is defined as any “water drained, pumped, or siphoned from a mine”.

F2-21

Recommendation: Wastewater referred to in the Draft EIS as “water inflow” and “draindown water in the WRSF” should be characterized correctly as “mine drainage”. The EIS should acknowledge that any discharge of mine drainage to surface waters must also comply with the effluent limitations and guidelines at 40 CFR Part 440 Ore Mining and Dressing.

Aquatic Biological Resources

Section 3.13 of the Draft EIS states that groundwater does not recharge Little Antelope or Antelope creeks (i.e., all creek water flows from precipitation and snowmelt). However, the discussion that follows (pgs. 3.13-7 and 8) conflicts with these conclusions by stating that the drawdown of groundwater will affect spring and wetland complexes along Antelope and Squaw creeks, which clearly will have potential adverse consequences on stream flows in these waterbodies (p. 3.13-7). Furthermore, Section 3.6 indicates that lower Little Antelope Creek gains groundwater baseflow contributions during the summer months.

F2-22

Recommendation: In light of the groundwater contamination discussed above, the matter of whether or not Little Antelope Creek receives groundwater contributions is particularly significant. The Supplemental Draft EIS should more clearly articulate the extent to which Little Antelope Creek receives significant baseflow from groundwater sources and which groundwater aquifers are believed to contribute to this flow.

Section 3.13.1.1 of the Draft EIS states that Little Antelope Creek is intermittent, however the subsequent discussion and Fig. 3.6-2 indicate that substantial portions are perennial.

F2-23

Recommendation: This discrepancy should be corrected, and presuming that Fig. 3.6-2 is correct, Section 3.13.1.1 should reflect that substantial portions of Little Antelope Creek are perennial.

The fish surveys discussed in Section 3.13.1.2 are outdated and only cover a small portion of the streams and stream reaches in the project area that could potentially support native fish.

Letter F2 Responses Continued

F2-20
(Cont)

Water Management for the Proposed Action is described in Section 2.4.3.4, Water Management, in the DEIS. Seepage from the proposed West Pit WRSF would be collected, sampled, and treated as described in Section 4.4.4.2, West Pit WRSF (DEIS). DEIS Figure 2-5 is easily understood and to break this into two figures would lead to confusion. No change to the text of the FEIS has been made to address this comment.

F2-21

Comment noted. The regulation cited (40 CFR 440.132) in the comment pertains to USEPA’s regulations for Subpart L-General Provisions and Definitions and Part 440 – Ore Mining and Dressing Point Source Category. Nevada is delegated by USEPA to administer the Clean Water Act permitting, monitoring, and enforcement. Discharge of water must comply with applicable federal and state standards. No water would be discharged into Little Antelope Creek until such time as the National Pollutant Discharge Elimination System (NPDES) permit is in place. Discharge requirements would be stipulated in the permit. In accordance with federal and state regulations, the NPDES permit would only allow the discharge of clean water into surface waters. There are no current or proposed processing facilities at the Hollister Site. Any discharge into surface waters under the NPDES permit including discharge into Little Antelope Creek, will be clean water and will meet applicable effluent standards.

No change to the text of the FEIS has been made to address this comment.

F2-22

Comment noted. The DEIS Section 3.6, Surface Water Resources and Watersheds, and Section 3.13, Aquatic Resources, describe the Little Antelope Creek, Antelope Creek, and Squaw Creek. Page 3.6-8 of the DEIS states “Based on these data, it seems likely that parts of lower Little Antelope Creek gain groundwater baseflow contributions through the summer months during years of average or greater precipitation.” However, as illustrated on Figure 3.6-4 (DEIS), the Vinini Formation is not present on the ground surface along Little Antelope Creek. Therefore, the groundwater baseflow would be from the volcanic rock aquifer.

F2-23

Comment noted. Substantial portions of Little Antelope Creek are intermittent; however, there are perennial reaches in the creek. The text of the FEIS was modified in Section 3.13.1.1 to note that there are perennial reaches in Little Antelope Creek.

The perennial stretch on Little Antelope Creek in this discussion of the DEIS pertains to the segment of Little Antelope Creek that lies within an enclosure, excluding this reach from grazing. The enclosure and this perennial reach of the stream are approximately 0.5 mile long.

Letter F2 Continued

F2-24 **Recommendation:** The Supplemental Draft EIS should include more recent, thorough fish surveys over several seasons to document the use of project area streams by native fishes.

The “limited visual” surveys of amphibians within the project area, discussed in Section 31.13.1.2, are not adequate to document the status of several amphibian species, such as Great Basin spadefoot toad, western toad, spotted frog, leopard frog, and Pacific tree frog, that are known to use, or could potentially use, aquatic habitats within the area.

F2-25 **Recommendation:** More thorough amphibian species surveys should be completed in order to adequately survey all species that could potentially use the aquatic habitats in the project area.

Section 3.13.2.1 of the Draft EIS assumes that sedimentation to Little Antelope Creek from surface disturbance activities will be minor; however, there is little supporting documentation for this conclusion. In addition, it is assumed that fish will not occur in areas affected by sedimentation in intermittent reaches of Little Antelope Creek, despite the fact that the Draft EIS states that flows will become more persistent in Little Antelope Creek due to the proposed NPDES permitted discharge of well water. It is very plausible that fish will colonize newly wetted, perennial reaches of Little Antelope Creek.

F2-26 **Recommendation:** The Supplemental Draft EIS should include a discussion of the potential impacts to fish species that may occur due to sedimentation in Little Antelope Creek, including those reaches expected to transition from intermittent to perennial due to the proposed NPDES permitted discharge.

Because impacts from surface disturbance are not adequately discussed or quantified in Section 3.13.2, there is little support for the conclusion presented in Section 3.13.3 (Cumulative Impacts) that the risk posed to aquatic areas from such disturbances is low. Clearly, impacts associated with groundwater pumping and resultant flow reductions in springs, seeps and streams would result in significant impacts to aquatic resources in the Antelope Creek sub-basin, and perhaps adjacent sub-basins. Beneficial environmental effects from increased flows in Little Antelope Creek during the period of discharge of dewatering water are unclear based upon the information presented. While flow augmentation may increase the growth of some riparian/wetland vegetation, there are potential adverse impacts of increasing the length of wetted channel (i.e., promoting the spread of the nonnative red shiner in the watershed, transport of mine drainage to downstream waters).

F2-27 **Recommendation:** The Supplemental Draft EIS should discuss and disclose the results and conclusions of a proper risk assessment in regards to the project’s potential to cumulatively impact aquatic resources in the study area. Any claims of beneficial effects from temporary increases in flow should be more thoroughly justified and adverse consequences considered.

Letter F2 Responses Continued

F2-24 Comment noted. An assessment completed by BLM in July of 2011 showed native fish species including Lahontan speckled dace, suckers, and redbreast shiners were widespread and abundant in the mainstem of Antelope Creek (BLM 2011). Prior surveys also have documented native fish distribution in the Antelope Creek drainage (see DEIS, Section 3.13.1.2, Aquatic Communities). All three of these species are considered widespread in western U.S. and occur in a variety of habitat types (Sigler and Sigler 1987). Because of their distribution and abundance, they are not considered at risk for extirpation. In addition, detailed hydrologic studies show no adverse impacts to Little Antelope Creek from water discharge (Brown and Caldwell 2011b). No change to the text of the FEIS has been made to address this comment.

F2-25 Comment noted. Amphibian surveys were completed in Little Antelope and Antelope creeks in August 2010 (AECOM 2010). When considering the predicted impacts for surface water and associated aquatic species, detailed surveys over several seasons would not provide additional information useful to the analyses. No change to the text of the FEIS has been made to address this comment.

F2-26 Comment noted. The potential impacts of sedimentation on aquatic habitats and species are considered minor (see Section 3.13.2.1, Proposed Action). Detailed hydrologic studies addressing discharge effects to the Little Antelope Creek channel show only minor increases in flow velocity and shear stress in this naturally armored channel (Brown and Caldwell 2011b). Based on a stream analysis and a channel stability assessment, Brown and Caldwell (2011b) conclude the discharge is not expected to adversely impact either hydraulic capacity of the channel or the natural sediment migration currently existing within the stream. Erosion control measures outlined in the Stormwater Pollution Prevention Plan (SWPPP) and Reclamation Plan and engineered storm water diversions also would minimize potential for sediment to reach the Little Antelope Creek channel. See Monitoring and Mitigation Plan (Appendix C). No change to the text of the FEIS has been made to address this comment.

F2-27 Comment noted. Cumulative effects are discussed in Section 3.13.3. Considering the types of impacts associated with the proposed Project on aquatic biological resources, a risk assessment is not necessary to evaluate cumulative impacts. By using the discharge outfall, flow would increase in Little Antelope Creek and result in increased aquatic habitat. This would convert an intermittent reach of the stream to perennial flow during the discharge period. The conclusion that the increased flows are not expected to adversely affect Little Antelope Creek and that

Letter F2 Continued

Groundwater Drawdown/Quantity Impacts

The Draft EIS does not include a description of the potential effects of specific model uncertainties on the model predictions in regards to the potential effects of groundwater drawdown.

F2-28

Recommendation: In view of the importance of the flow model predictions to subsequent impact analyses, the Supplemental or Revised Draft EIS should include a more complete and specific description of uncertainties associated with factors such as structure, boundary conditions, and calibration of the model and their potential effects on the model predictions, including uncertainties arising in connection with:

- availability of calibration data;
- overparameterization (the total number of parameters comprising the model, whether assigned or calibrated);
- the incorporation of geologic features such as flow barriers;
- the specification of constant head conditions on the lateral model boundaries;
- the plausibility of model-calibrated transmissivity;
- whether or not the model results in the reproduction of spring discharges; and
- validity of assumed rates of depth decay of hydraulic conductivity within regional modeling units (RMUs).

The Supplemental Draft EIS should reflect that model predictions of drawdown and changes in spring/stream discharge at specific locations are highly uncertain due to the limitations of the flow model, and, consequently, the analysis of impacts to spring and stream quantity, quality and biology is highly uncertain.

Drawdown predictions produced using the model approximate the minimum areal extent and magnitude of drawdown that will result from project pumping because they are based on 10-ft contours. However small changes in groundwater levels can have dramatic effects on springs, streams and wetlands. A two or five foot contour interval would be a more appropriate measure of the maximum extent and magnitude of drawdown and would allow for more accurate assessment of impacts. The model represents a minimum diffusivity interpretation of the flow system which yields estimates of the minimum extent of drawdown rather than a best estimate.

F2-29

Recommendation: Both a best estimate and maximum extent drawdown should also be provided in the Supplemental Draft EIS.

There are many more aquatic areas included within the 10-foot groundwater drawdown contour area than are analyzed within the Draft EIS, which focuses primarily on the Antelope Creek sub-watershed. It is unclear why the analysis in the Draft EIS does not consider potential effects of groundwater drawdown on other aquatic features such as Willow Creek, Hot Creek, etc.

F2-30

Recommendation: The Supplemental Draft EIS should discuss the project’s impacts upon all areas that fall within the significance threshold for groundwater quantity impacts.

Table 3.9.2 - Wetland Areas Potentially affected by Groundwater Drawdown, references studies in support of its conclusions, but without any summary of this information in the Draft EIS, and

Letter F2 Responses Continued

F2-27 (Cont) discharge water would be locally available to existing plant and animal communities is based on hydrologic modeling and a detailed channel stability assessment (Brown and Caldwell 2011b).

F2-28 Comment noted. Appendices B2, Groundwater Model Report, and B3, Geochemical Model Report (DEIS), provide sufficient detail on the input data, assumptions, calibrations, and results to assess potential impacts from the proposed Project. The availability of calibration data is discussed in Appendix B2, Section 4.2, Model Calibration, which describes the addition of a 1,763-day transient calibration period to ensure that the model was adequately simulating groundwater drawdown. Uncertainty with respect to boundary conditions is addressed in Appendix B2, Section 3.3.4, Model Domain and Boundary Conditions, which describes assessment of the boundary conditions. The thickness of the Vinini aquifer is known in an approximate sense, and the hydraulic conductivity values used are from local aquifer testing. The calibrated hydraulic conductivity values ranged from a factor of 1.5 to 2.0 times the hydraulic conductivity estimated from the local aquifer testing. Therefore, the calibrated hydraulic conductivity value is very reasonable with respect to the estimated value, and the resulting calculated transmissivity is completely plausible. Reduced hydraulic conductivity with depth (“depth decay”) is frequently observed and incorporated into groundwater models. In the case of the Hollister groundwater model, the depth decay was slight (from 2.0 to 1.5 feet/day), and the validity of this decay was substantiated through model calibration (see Appendix B2, Section 4.2, Model Calibration).

While uncertainties exist in all groundwater models, the Hollister model is calibrated to actual drawdown observed in the underground mine workings over a 1,763-day period of groundwater removal.

It should be noted that Appendix B2, Groundwater Model Report, states in Section 4.3.2, Simulated Water Budget, that “Note that no recharge or leakage from overlying units was included in either simulation, a conservative assumption taken to not allow an underestimation of future mine-related drawdown during the predictive simulation.” Therefore, the analysis of impacts to spring and stream quantity, quality, and biology is not highly uncertain. No change to the text of the FEIS has been made to address this comment.

Groundwater monitoring data as identified in the Final Monitoring and Mitigation Plan (Appendix C) would be used to update the models and refine impact predictions.

F2-29 Comment noted. The 10-foot drawdown contour is standard in Nevada because this is the range of seasonal variation in groundwater levels in

Letter F2 Responses Continued

- F2-29 wells. Groundwater modeling is less precise at predicting groundwater changes at levels less than ten feet, particularly in areas distant from the pumping sources. Using the hydrologic model to predict drawdown to a level less than 10 feet does not represent the best science and is not needed in order to take a hard look at the potential environmental consequences.
- (Cont)
- Also, use of the numeric flow model to Project potential drawdown at magnitudes of less than approximately 10 percent of the local magnitude of the drawdown becomes progressively uncertain as the threshold for drawdown prediction decreases. While the numeric model produces values of drawdown to small fractions of a foot, extrapolated over vast distances of the model domain, the numbers at this level of precision become an artifact of numeric processes rather than a representation of a physical reality. This is due to physical and mathematical simplifications necessary to model the groundwater regional flow system. While there is no standardized way to determine a reporting threshold, the value of 10 feet is believed to be commensurate with the predictive qualities and uncertainties associated with the model. It is acknowledged that lesser degrees of drawdown can have impacts. However, modeling in complex geologic settings have limitations, and to report modeling results to very small thresholds would project false levels of model utility. No change to the text of the FEIS has been made to address this comment.
- F2-30 Comment noted. Section 3.5.2.3, Groundwater and Geochemistry, Proposed Action of the DEIS describes the screening methodology used to evaluate potential impacts to surface water features from groundwater drawdown. Only surface water features sourced in the Vinini or Strathearn formations with a spring elevation less than 50 feet above the groundwater elevation potentially would be affected by groundwater drawdown in the Vinini Formation. The EIS analyzed all wetlands and surface waterbodies where the depth to groundwater was 50 feet or less and sourced in the Vinini or Strathearn formations. Any aquatic areas which did not meet this criteria were not analyzed because they would not be affected by groundwater drawdown. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

therefore EPA is unable to judge the validity of the conclusions. Based upon the information available, it seems that the primary justification for determining that certain springs and wetlands have a low potential to be affected by groundwater drawdown is that they do not lie on the Vinini Formation. The Draft EIS does not provide sufficient justification for this assumption. Given the Draft EIS' projection that groundwater drawdown would reduce stream flows along 10.4 miles of Antelope Creek (see Page 3.13-7), and that reduced flows from springs contributing to Antelope, Alkali and Squaw creeks may result in the long-term loss of some riparian vegetation (pg. 3.9-8), it seems likely that riparian/wetland habitats adjacent to the creek would be adversely affected. Furthermore, the Draft EIS does not assess the wetland/stream functions lost or degraded by groundwater pumping and drawdown.

F2-31

Recommendation: These potential impacts to riparian/wetland areas should be assessed more thoroughly in the Supplemental Draft EIS. The document should include both a quantitative and qualitative analysis of the full extent of riparian/wetland habitats likely to be impacted by the proposed project and a functional assessment of the wetland/stream values likely to be degraded or lost due to groundwater pumping and drawdown.

Mitigation for Impacts from Dewatering

The mitigation measures presented in Sections 3.9.4 and 3.13.4 are not adequate to offset the potential impacts identified in these sections. There is no mention of reduced groundwater pumping as a way to mitigate for water drawdown and its impacts on wetlands and other aquatic areas. There are no monitoring or mitigation measures proposed for the reduced flows/drying along 10.4 miles of Antelope Creek and its effects on aquatic organisms such as fish. Impacts resulting from groundwater pumping associated with the proposed project will likely cause or contribute to significant degradation of the aquatic ecosystem in the project area.

F2-32

Recommendation: The Supplemental Draft EIS should indicate that the project is likely to result in significant degradation of aquatic ecosystems in the study area. Additional mitigation measures should be considered, including reduction or cessation of groundwater pumping if a particular mitigation threshold is passed.

Stormwater

Section 3.6.2.1 of the Draft EIS states that the proposed action "has the potential to increase sediment and turbidity due to construction and ground disturbing activities". The Draft EIS defers to the Storm Water Pollution Prevention Plan (SWPPP) and Reclamation Plan to address these impacts, stating "To further reduce erosion potential, storm water diversions would be installed upgradient and around project facilities, as needed, to divert storm water runoff around disturbance areas. Facilities would be graded appropriately and monitored following spring snowmelt and intense rain events to ensure that drainage and sediment control measures are effective and operating properly" (Section 2.4.9.2 page 2-59). The Draft EIS provides little information on the types and extent of proposed Best Management Practices (BMPs) and other provisions that would be likely to be included in a NPDES permit for this project issued by the State of Nevada.

Letter F2 Responses Continued

F2-31 Comment noted. Acres of riparian/wetland areas that would likely be affected by groundwater drawdown were provided in the DEIS in Section 3.9, Riparian and Wetland Areas. A functional assessment of the riparian/wetland areas that may be affected by groundwater drawdown is not warranted.

The DEIS Section 3.5.2.3, Groundwater and Geochemistry, Proposed Action, describes the screening methodology used to evaluate potential impacts to surface water features from groundwater drawdown. Only surface water features sourced in the Vinini or Strathearn formations with a spring elevation less than 50 feet above the groundwater elevation potentially would be affected by groundwater drawdown in the Vinini Formation. The EIS analyzed all wetlands and surface waterbodies where the depth to groundwater was 50 feet or less and sourced in the Vinini or Strathearn formations. Additional information on condition of major riparian and wetland habitats potentially impacted by cumulative effects of groundwater drawdown has been added to the FEIS (see Section 3.9.3, Cumulative Impacts).

F2-32 Comment noted. Impacts of groundwater pumping on aquatic habitat and species are discussed in Section 3.13.2.1, Aquatic Resource Proposed Action, under Water Management Activities. See Monitoring and Mitigation Plan, Appendix C. The Brown and Caldwell (2011b) study concluded that water discharge into Little Antelope Creek is not expected to have an adverse impact on hydraulic capacity or natural sediment movement. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

F2-33

Recommendation: Due to the high sensitivity of certain receiving waters identified in the Draft EIS as “Class A” and perennial waters, EPA recommends that the Supplemental Draft EIS provide a comprehensive description of the BMPs and stormwater controls to be utilized, including maps, BMP locations, outfall locations, temporary and permanent stabilization measures, maintenance requirements, and other components of the SWPPP necessary to mitigate the potentially adverse effects on receiving waters.

EPA recommends that the Supplemental Draft EIS include stormwater outfall monitoring for sediment and turbidity to ensure the BMP implementation is protective of receiving water quality. EPA recommends weekly monitoring for Total Suspended Solids and Turbidity for all stormwater outfalls discharging to perennial waters to ensure proper design and implementation of BMPs.

Air Quality

The Draft EIS states, “The only Hazardous Air Pollutant (HAP) that would be emitted due to this project is mercury. Mined ore containing mercury would be processed at either the Esmeralda Mill or the Midas Mill.” (3.19-15) Diesel fuel emissions contain a number of HAPs. It seems unlikely, therefore, that this statement accurately reflects all potential sources of HAPs that are likely to be emitted as a result of the proposed project.

F2-34

Recommendation: The Supplemental Draft EIS should account for all potential sources of HAPs in determining the total emissions associated with the proposed project (i.e. emissions associated with the combustion of diesel fuel, etc.).

The proposed project includes the shipment of ore for milling off site at either the Midas Mill or the Esmeralda Mill. Considering the approximately 300 additional miles from the Hollister Underground Mine site and the Esmeralda Mill site, as compared to the distance to the Midas Mill site, milling of Hollister Underground ore at the Esmeralda Mill would result in a substantially larger carbon footprint for the proposed project as well as increased mobile source emissions, particularly from heavy-duty diesel trucks.

F2-35

Recommendation: EPA encourages the project proponent and the BLM to reconsider the decision to utilize the Esmeralda Mill site as a milling location for Hollister Underground Mine ore.

Letter F2 Responses Continued

F2-33

Comment noted. RCG has a current SWPPP as required under State of Nevada regulations and administered by NDEP. The DEIS (Section 3.6.2.1, Surface Water, Proposed Action) describes all of the BMPs and storm water controls required under the storm water permit. No change to the text of the FEIS has been made to address this comment.

F2-34

The combustion of fossil fuels results in emissions of a number of criteria pollutants, hazardous air pollutants (HAPs) and greenhouse gases (GHGs). A summary of criteria pollutant emissions from the diesel-fired stationary combustion sources located at the Hollister Site are listed in Table 3.19-4. In the DEIS, it states that diesel emissions from stationary sources would decrease due to the delegation of the generators to emergency backup only as electric power from transmission lines becomes the primary power source for the Project. Since publication of the DEIS, the generators have been replaced with newer more efficient generators that operate on cleaner-burning LNG. As such, the original Table 3.19-4 overstates current emissions at the Hollister Site. All emissions categories should decrease as a result of the change in equipment and fuel. A revised Table 3.19-4 has been provided in the FEIS to reflect the new and more efficient equipment and fuel used on site.

Section 3.2.1 of Appendix G, Air Quality Technical Support Document for the Hollister Underground Mine Project DEIS, indicates that the two existing Cummins diesel generators located at the East Pit would be reduced to 500 hours of emergency backup operation due to electric power being supplied by the transmission line as part of the proposed action. Largely as a result of using the diesel generators for emergency backup power only, the DEIS concluded that “the total emissions for the stationary source emissions due to the Proposed Action would be less than the existing Hollister operations under the No Action Alternative.” See Appendix G, Section 3.2.1. This conclusion would still hold true and is still appropriate whether diesel or LNG fueled generators are in use. However, as indicated in the FEIS, the two diesel generators at the East Pit have been switched out for generators fueled by LNG. Overall, natural gas-driven generators cause significantly less air emissions than diesel-driven generators. Indeed, criteria pollutant emissions are significantly decreased as a result of the new LNG engines from 24.8 tons per year for the diesel units to 5.548 tons per year for the LNG units. While hazardous air pollutants would increase slightly with the natural gas engines, due solely to emissions of formaldehyde, the yearly total HAP emissions (8.56E-02) are insignificant. Thus, the total emissions for the stationary source emissions due to the Proposed

Letter F2 Responses Continued

- F2-34 (Cont) Action are even less than was estimated in the DEIS, and are still less than those under the No Action Alternative.
- F2-35 Comment noted. However, the milling location would depend on capacities of the mill to handle additional ore under current permits, contractual agreements, costs, and other factors. RCG chose not to propose on-site processing facilities, which would have reduced mobile source emissions in comparison to the Proposed Action, due to concerns raised by certain Western Shoshone Tribes. No change to the text of the FEIS has been made to address this comment.

Letter S1

Mine,

<http://clearinghouse.nv.gov/public/Notice/2012/E2012-243.pdf>

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:

S1-1 Multiple use activities on Nevada's public lands are supported and encouraged. Please consider 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.

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

Utilize appropriate lighting:

- S1-2
- 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 should be consolidated and minimized wherever possible.

In addition, the following mitigation measures should be employed.

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

- S1-3
- 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.
- S1-4
- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Skip Canfield
State Land Use Planning Agency

Letter S1 Responses

- S1-1 Comment noted. Chapter 3.0, specifically Section 3.22, Visual Resources, of the DEIS discloses the potential cumulative impacts associated with the proposed Project. No change to the text of the FEIS has been made to address this comment.
- S1-2 Comment noted. In order to provide adequate lighting to protect workers safety, some light may be visible from adjacent lands and into the night sky. However, RCG will use dark sky methods such as reflectors to ensure light is directed downward to lessen the impacts to adjacent lands and the night sky. Section 3.22.3, Visual Resources, pages 3.22-6 to 3.22-8, provides a discussion of the potential impacts to visual resources. No change to the text of the FEIS has been made to address this comment.
- S1-3 Comment noted. When developing the proposed Project, RCG considered the placement of the facilities to lessen the visual impacts of the proposed facilities on the landscape. RCG proposes to paint the buildings and applicable structures with colors that match the natural surroundings (DEIS Section 2.4.9.7, Applicant-committed Environmental Protection Measures, Visual Resources). Section 3.22, Visual Resources, provides a discussion of the potential impacts to visual resources resulting from the Proposed Action. No change to the text of the FEIS has been made to address this comment.
- S1-4 Comment noted.

Letter S2

Skip Canfield

From: Alex Lanza
Sent: Monday, June 18, 2012 3:01 PM
To: Skip Canfield
Subject: RE: Nevada State Clearinghouse Notice E2012-243 - DEIS Hollister Underground Mine

Good morning Skip;

The Nevada Division of Environmental Protection (NDEP) - Bureau of Water Pollution Control (BWPC) - does not have any comments regarding **Notice E2012-243 - DEIS Hollister Underground Mine, Nevada.**

S2-1 [Please note that the entity who manages this **DEIS Hollister Underground Mine project** may be subject to BWPC permitting associated with any of its discharges – including, but not limited to well development, wastewater, Diminimis, UIC, and domestic sewage discharges.

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>

Letter S2 Response

S2-1 Comment noted. The operator is responsible for obtaining all applicable federal, state, and county permits.

Letter S3

Nevada State Clearinghouse Notice E2012-243

Project: DEIS Hollister Underground Mine

- S3-1 { 1. There are other water rights holders that may be affected by project activities. Rodeo Creek Gold must not impair surrounding water rights holders or they may be required to submit a Monitoring Mitigation and Management (3M) Plan showing how the water rights can be fulfilled if they do become impacted.
- S3-2 { 2. Please be advised that any water used on the described project be provided by an established utility or under permit or waiver issued by the State Engineer’s Office. All waters of the State belong to the public and may be appropriated for beneficial use under the provisions of Nevada Revised Statutes (NRS) Chapters 533 and 534 and not otherwise.

Monica Grammenos
Water Resource Specialist I
Nevada Division of Water Resources

June 15, 2012

Letter S3 Responses

- S3-1 Comment noted. The DEIS addresses Water Rights in Section 3.6, Surface Water Resources and Watersheds. The section states that water rights are regulated by Nevada Division of Water Resources (NDWR) and the BLM does not have the authority to regulate water rights in Nevada. See DEIS pages 3.6-9 to 3.6-10 and Figure 3.6-3. No change to the text of the FEIS has been made to address this comment.
- S3-2 Comment noted. See response to comment S3-1.

Letter S4

Skip Canfield

From: Rebecca Palmer
Sent: Wednesday, June 20, 2012 9:58 AM
To: Skip Canfield
Subject: RE: Nevada State Clearinghouse Notice E2012-243

The SHPO has reviewed the subject document. Although the draft Programmatic Agreement (PA) is mentioned frequently throughout the document, the SHPO cannot find any statement that either informs the public that they can comment on the PA or provides a copy of the draft document for review. [Is this request for public review contained in some other announcement or public document? If not, the SHPO strongly recommends that the public be provided with an explicitly-stated opportunity to comment on the document through some NEPA document in accord with the draft PA.] The SHPO notes that the reference to the statewide Protocol Agreement is out of date, please correct the date to read amended in 2012.

S4-1
S4-2

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: Friday, June 01, 2012 2:55 PM
To: Alan Coyner; Alan Jenne; Alisanne Maffei; clytle@lincolnnv.com; cstevenson@ndow.org; Brad Hardenbrook; 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; cohn@nv.doe.gov; Lowell Price; Mark Freese; Mark Harris; Mike Dondero; deborah.macneill@nellis.af.mil; escomm2@citlink.net; Octavious.Hill@nellis.af.mil; Pete Anderson; Rebecca Palmer; Rich Harvey; Robert K. Martinez; Sandy Quilici; Steven Siegel; tcompton@dot.state.nv.us; Terry Rubald; Richard Ewell; tmueller@dot.state.nv.us; Tod.oppennborn@nellis.af.mil; William.Cadwallader@nellis.af.mil; zip.upham@navy.mil; Tim Rubald; Alex Lanza; Dave Marlow; Michael Visher; Kevin J. Hill; dziegler@lcb.state.nv.us; Richard A. Wiggins; Robert Gregg; Shimi.Mathew@nellis.af.mil; Skip Canfield; whenderson@nvnaco.org; mstewart@lcb.state.nv.us; Pete Konesky; Russ Land; Sherry Rupert; sscholley@lcb.state.nv.us
Subject: Nevada State Clearinghouse Notice E2012-243



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: 06/01/2012

U.S. Bureau of Land Management

Nevada State Clearinghouse Notice E2012-243

Letter S4 Responses

- S4-1 Comment noted. 36 CFR 800.4(b)(ii) governs PAs and states, in part, “[t]he agency shall arrange for public participation... and take steps to involve the individuals, organizations and entities likely to be interested.” The PA is designed to evaluate National Register of Historic Places (NRHP) eligible sites and/or sites of Tribal concern that could be adversely impacted by the proposed Project and implement mitigation procedures to minimize any adverse impacts. The BLM provided four versions of the draft PA between the BLM, SHPO, ACHP, and RCG for the Project to the Tribes for review, and conducted meetings with the interested Tribes. A copy of this PA is included in Appendix A of the FEIS.
- S4-2 Comment noted. The FEIS has been corrected to state that the statewide Protocol Agreement was amended in 2012.

Letter S4 Continued

Project: DEIS Hollister Underground Mine

Follow the link below to find information concerning the above-mentioned project for your review and comment.

E2012-243 - <http://clearinghouse.nv.gov/public/Notice/2012/E2012-243.pdf>

- **Please evaluate this project's effects on your agency's plans and programs and any other issues that you are aware of that might be pertinent to applicable laws and regulations.**
- **Please reply directly from this e-mail and attach your comments.**
- **Please submit your comments no later than Monday July 2nd, 2012.**

PLEASE NOTE: This is a large file, if you have trouble with the Clearinghouse link, go to http://www.blm.gov/nv/st/en/fo/elko_field_office.htm

Clearinghouse project archive

Questions? Skip Canfield, Program Manager, (775) 684-2723 or nevadaclearinghouse@lands.nv.gov

No comment on this project Proposal supported as written

AGENCY COMMENTS:

Signature:

Date:

Requested By:

Distribution:

Alan Coyner - Commission on Minerals

Alan Jenne - Department of Wildlife, Elko

Alex Lanza -

Alisanne Maffei - Department of Administration

Letter S4 Continued

Cory Lytle - Lincoln County
Craig Stevenson - Department of Wildlife, Las Vegas
D. Bradford Hardenbrook - Department of Wildlife, Las Vegas
Dave Marlow -
Dave Ziegler - LCB
David David - UNR Bureau of Mines
David Mouat - Desert Research Institute
Ed Rybold - NAS Fallon
James D. Morefield - Natural Heritage Program
Jeff Hardcastle - State Demographer
Jennifer Newmark -
Jennifer Scanland - Division of State Parks
John Muntean - UNR Bureau of Mines
John Walker - Nevada Division of Environmental Protection
Jon Price - UNR Bureau of Mines
Karen Beckley - State Health Division
Kevin Hill - Nevada State Energy Office
Kirk Bausman - Hawthorne Army Depot
Linda Cohn - National Nuclear Security Administration
Lowell Price - Commission on Minerals
Mark Freese - Department of Wildlife
Mark Harris, PE - Public Utilities Commission
Michael J. Stewart - Legislative Counsel Bureau
Michael Visher - Division of Minerals
Mike Dondero - Division of Forestry
Ms. Deborah MacNeill - Nellis Air Force Base
Nancy Boland - Esmeralda County
Octavious Q. Hill - Nellis Air Force Base
Pete Anderson - Division of Forestry
Pete Konesky - State Energy Office
Rebecca Palmer - State Historic Preservation Office
Rich Harvey - Division of Forestry
Richard A. Wiggins - State energy office
Robert Gregg - NTRT
Robert Martinez - Division of Water Resources
Russ Land - Nevada Division of Environmental Protection
Sandy Quilici - Department of Conservation & Natural Resources
Sherry Rupert - Indian Commission
Shimi Mathew - Nellis AFB
Skip Canfield, AICP - Division of State Lands
Steve Siegel - Department of Wildlife, Director's Office
Susan Scholley - Legislative Counsel Bureau
Terri Compton - Department of Transportation
Terry Rubald - Nevada Department of Taxation, Local Government, Central
Tim Rubald - Conservation Districts
Timothy Mueller - Department of Transportation
Tod Oppenborn - Nellis Air Force Base
Wes Henderson - NACO
William Cadwallader - Nellis Air Force Base
Zip Upham - NAS Fallon

Letter S5



BRIAN SANDOVAL
Governor

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COMMISSION ON MINERAL RESOURCES
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ALAN R. COYNER
Administrator

DM		
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SUPPORT SERV.		
PERE		
OPERATIONS		
CA. TRAIL		
PUBLIC AFFAIRS		

July 12, 2012

Janice Stadelman, EIS Project Coordinator
Bureau of Land Management
Tuscarora Field Office
3900 Idaho Street
Elko, NV 89801

Dear Ms. Stadelman:

S5-1

Please be advised the Nevada Division of Minerals supports the Proposed Action and Backfill Alternative for the Rodeo Creek Gold Inc.'s Hollister Underground Mine Project.

Sincerely,

Alan R. Coyner
Administrator

Letter S5 Response

S5-1 Comment noted.

Letter S6

JOHN C. ELLISON
ASSEMBLYMAN
District No. 33



COMMITTEES:
Commerce and Labor
Government Affairs
Natural Resources,
Agriculture, and Mining
Taxation

State of Nevada
Assembly
Seventy-Sixth Session

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Letter S6 Responses

- S6-1 Comment noted.
- S6-2 Comment noted.
- S6-3 Comment noted.

To: Bureau of Land Management

7/14/2012

Re: Hollister Mine permits

S6-1

Dear Bureau of Land Management, I am expressing my full support for the Hollister Mine and urging all parties to expedite the approval of their permits. It is critical that your approval of this permit so that they can move forward with their plans to create hundreds of jobs and bring billions in tax revenue to our community and state including our country.

The Hollister Mine will bring 250 direct local jobs and approximately 1,500 indirect jobs in a variety of industries such as construction, utilities, manufacturing and retail. The Hollister Mine will be a great economic engine for the area,

Great Basin Gold has shown how they are good Stewards of the land by utilizing state-of-the-art technology to ensure that during the dewatering process prior to mining; the water will not come into contact with any operations, leaving it pure to be released into Little Antelope Creek. Additionally, all water used during mining will be filtered, cleaned and recharged back into the ground.

S6-2

All ore will be milled offsite, protecting our air quality. While most of the waste rock will be used as backfill, the remaining rock will be carefully stored and then reclaimed. Great Basin Gold employs the ONLY fully-lined waste rock storage area in the state.

The Hollister Mine will operate fully within the current footprint of the existing mine, with the exception of two escape ways, less than 30 feet in diameter.

Great Basin has an extensive land reclamation plan to restore habitat for wildlife, protect plant life and create natural contours that will remove the marks of past activity. Their goal is to leave the land in better shape than when they found it.

S6-3

I strongly ask for your support for this permit in a timely manner so we can put Nevada back to work for the betterment of our state. If there is anything I can do to help with this process please feel free to call anytime.

Thank you

Assemblyman John Ellison

Letter TB1

From: Buster Gibson [<mailto:gibson.buster@shopai.org>]
Sent: Monday, July 16, 2012 1:51 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Comments from the Shoshone-Paiute Tribes on the Hollister Underground Mine Project DEIS

--
Thanks,
Buster Gibson
Tribal Business Council Member
Shoshone-Paiute Tribes
P.O. Box 219
Owyhee, NV 89832
(208) 759-3100 ex. 230
E-mail gibson.buster@shopai.org

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Letter TB1 Continued

Formal comments provided to the BLM by the Shoshone-Paiute Tribal Chairman, Terry Gibson

TB1-1 Consultation with the Shoshone-Paiute Tribal government has not occurred in regards to the draft EIS for the Hollister Underground Mine Project. Below is a listing of issues that are extremely important culturally, environmentally, and religiously to the Shoshone-Paiute Tribes and demands further meaningful consultation.

Groundwater and Geochemistry

TB1-2 The mine will be dewatered at a maximum rate of 1,100 gpm on a continuous basis for the 20 year life of the mine resulting in Lowering of the water table and reducing flows in four spring complexes. **This will have a serious impact on the Tribes religious use of the springs in the area.**

TB1-3 95% recovery of the water table would occur 30-35 years after the end of the 20 year mine life. It will take 55 years for the water table to rebound to current conditions. **How do you mitigate for the loss of the religious wellbeing of spiritual use when these areas are dried up.**

Riparian and wetland areas

TB1-4 Ground water drawdown in the vinini formation potentially could reduce flows in four spring complexes and affect approximately 12 acres of wetlands. Based on the projected groundwater drawdown, it is anticipated that approximately 16 wetlands have the potential to be affected by groundwater drawdown in the long term. In addition, reduced flows from springs contributing to antelope, alkali, and squaw creeks may result in the long-term loss of riparian vegetation. Groundwater flows to springs and seeps potentially impacted by the Proposed Action are projected to recover in approximately 50 to 100 years following initial drawdown. **The religious and spiritual use of medicinal, food plants and the impacts to them is not addressed.**

T1B-5 Construction of the proposed project would not remove or disturb riparian or wetland areas. **This statement contradicts information provided in other areas of this document.**

Native American Traditional Values

TB1-6 Affects to Traditional Native American values include potential direct impacts to historic properties, as well as groundwater drawdown impacts to sacred springs. **With regard to this statement it shows a clear need for further consultation on how mitigation will occur.**

Letter TB1 Responses

TB1-1 Comment noted. The government-to-government consultation process is an on-going process and does not end at the completion of the DEIS. Section 3.17.1.3, Native American Consultations, (DEIS) describes the government-to-government consultation activity and information sharing efforts for this Project. The FEIS has been updated with the most recent information regarding government-to-government Tribal consultation activities and information sharing efforts.

TB1-2 Comment noted. Under full disclosure of possible impacts, it is stated that four spring complexes, sourced in the Vinini Formation, on privately owned land (not BLM administered land) could potentially be affected by drawdown (DEIS page 3.17-9, Drawdown Impact to Springs). Seeps and springs in the area sourced by water from the Tertiary Volcanics will not be impacted by this Project. Even the best science does not clearly define if these springs will be impacted; if impacted at what level of impact; if the impacts would be long-term; or the recovery rate should this occur. The Monitoring and Mitigation Plan details the methods by which some springs will be monitored for impacts. Some of these springs within the four spring complexes have been monitored for several years and will continue to be monitored under a different project. Mitigation may be conducted under both projects. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4). Possible mitigation measures to lessen impacts are defined in Section 3.17.2.1 as well as the acknowledgement that "Adverse effects to religious, spiritual, or sacred values cannot be monitored or mitigated."

No change to the text has been made to address this comment.

TB1-3 Comment noted. See response to comment TB1-2.

TB1-4 Comment noted. Concerns regarding medicinal and food plant species have not been identified as an issue through the government-to-government Tribal consultation nor during the scoping period for the DEIS. Currently, the BLM does not have sufficient information or detail to analyze the Project impacts on Native American Traditional Values as they relate to medicinal plants and food plant species. Medicinal and food plant species will be brought forward in future government-to-government Tribal consultation and general discussions with the Western Shoshone people. No change to the text has been made to address this comment.

TB1-5 Comment noted. Surface disturbance (mining, exploration, or construction of facilities) associated with the Proposed Action would not occur in riparian/wetland areas. Implementation of the BMPs for erosion

Letter TB1 Responses Continued

- TB1-5 control would prevent direct impacts to riparian/wetland areas (DEIS, (Cont) page 3.9-4).
- The proposed discharge of water into Little Antelope Creek under the NPDES permit would increase the size of the current riparian/wetland areas during the period of increased water discharge through the life of the mine. At the end of the life of the mine, discharge of water into Little Antelope Creek would cease, and the riparian/wetland areas would decrease in size and location to the pre-mining state. Riparian/wetland areas are described in the Section 3.9, Riparian and Wetland Areas; Section 3.6, Surface Water Resources and Watersheds; and Section 3.5, Groundwater Resources and Geochemistry. No change to the text has been made to address this comment.
- TB1-6 Comment noted. Issues of monitoring and mitigation for potential direct, indirect, and cumulative effects to Historic Properties, Traditional Native American values, sacred springs, and other concerns are discussed in both the PA and the Monitoring and Mitigation Plan. The language within the PA has been an on-going topic within Tribal consultation since its initial draft form. The PA has detailed all monitoring and mitigation, including Western Shoshone input and participation at the levels to which the specific Tribes and Bands chose to participate. Each Western Shoshone Tribe or Band has been offered the role as concurring party to this PA. The Monitoring and Mitigation Plan covers those issues that are outside the scope of the SHPO and ACHP; therefore, not specifically addressed within the PA.

Letter TB1 Continued

- TB1-7 Any effects to springs and streams may in turn affect Native American Traditional Values because of the sacredness of water to the tribes. **Again how will this be mitigated?**
- Cultural Resources and Regulatory Framework**
- TB1-8 If the BLM determines that historic properties of traditional, religious and cultural importance would be adversely impacted, then mitigation would be proposed in accordance with the Programmatic agreement (PA). **The PA is wholly Inadequate.**
- TB1-9 A PA for a complex project lays out the steps that the agency and consulting parties agree would be taken to consider the effects of the project on historic properties and to resolve any adverse effects. **This PA does not address spiritual and religious impacts that are protected by law.**
- TB1-10 A PA among the BLM, Nevada SHPO, ACHP & RCG is currently being prepared for the proposed project. Federally recognized Native American Tribes with cultural ties to the study area have been invited to participate in the development of the PA as concurring parties. **The Tribes would agree to a PA that we are comfortable being signatories to not just to concur, that would address our concerns.**
- TB1-11 The PA defines general and specific measures that would be undertaken by the BLM, SHPO, and RCG to ensure that the BLM's objectives and responsibilities regarding the protection of historic properties under the NHPA would be fulfilled. **What about the application of the religious use of the area?**
- TB1-12 The occurrence of Tosawihi-like tool stone has been observed as far as 93 miles from the source. **This is very limiting the area is much larger than that.**
- BLM attended Tribal Council meetings and provided details of the proposed project; previous NEPA analysis in the project vicinity and biological survey data for the proposed project. Tribal council requested that all mining activities stop in the Tosawihi quarries. Also the Tribal council requested copies of the final archaeological reports for the proposed project. During meetings and field visits, Tribal individual participants discussed the importance of Tosawihi as a cultural site; expressed concern with looting of chert deposits. Several meetings were cancelled. **The Tribes have been attempting to develop consultation protocol with the Nevada BLM and have been unsuccessful up to this point.**
- TB1-13
- The PA among the BLM, Nevada SHPO, Advisory Council on Historic Preservation (ACHP), and Rodeo Creek Gold (RCG) is being developed for an area that encompasses the proposed project. The Tribes and Bands listed were asked to participate in the development of the PA as concurring parties. **Again this PA only addresses section 106 of the NHPA there is no process to apply all of the other relevant acts, congressional mandates, and federal laws that protect Tribal rights.**
- TB1-14

Letter TB1 Responses Continued

- TB1-7 Comment noted. As explained in the DEIS, the monitoring of tangible items under the language in the PA may aid in continued management of intangible items. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4). Possible mitigation measures to lessen these impacts are defined in the DEIS, Section 3.17.2.1, and in the Monitoring and Mitigation Plan. This issue is included within on-going Tribal consultation and future government-to-government consultation. The Monitoring and Mitigation Plan is in Appendix C of the FEIS.
- TB1-8 Comment noted. The Draft PA was the subject of continuing consultation efforts at the time the DEIS was published. The PA has been revised, subject to additional consultation and discussion. A copy of the PA is located in Appendix A of the FEIS.
- TB1-9 Comment noted. The BLM conducts routine monitoring of the area. The PA focuses on management in addition to routine monitoring. Monitoring includes tangible items such as Historic Properties, TCPs, areas of known concern, and areas of traditional value. This level of monitoring and mitigation of tangible items may indirectly address concerns identified through Tribal consultation regarding intangible items. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4, page 3.17-13).
- TB1-10 Comment noted. State and federal agencies are, pursuant to regulations, required signatories to the PA. Invited signatories generally sign the PA because they have funding or other obligations under a PA. Concurring Party is defined as "including representatives of local governments, applicants, and certain individuals and organizations with a demonstrated interest in the undertaking due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on Historic Properties" (36 CFR 800.2(c)(3-5). The PA is an agreement written to define the roles of the Signatory Parties, Invited Signatory Parties, and the Concurring Parties, including how monitoring and mitigation of Historic Properties will be conducted. To date, one written comment letter has been received regarding the PA. This written communication indicates a positive response to the PA.
- TB1-11 Comment noted. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4, page 3.17-13). The BLM has invited the Tribal and Band governments to be concurring parties under 36 CFR 800.2(c)(3-5). Every effort has been made through Tribal consultation and informational sharing efforts to not only be well informed as to the needs associated with the religious and

Letter TB1 Continued

The PA identifies steps to be taken to 1) Identify cultural resources. 2) Evaluate them to determine if they are eligible for listing on the National Register of Historic Properties (NRHP). 3) Identify potential adverse effects. 4) Develop measures to avoid, reduce, or mitigate adverse effects. And 5) Address inadvertent discoveries. **These issues need to be addressed through meaningful consultation with the Tribes.**

TB1-15

A copy of the PA was mailed to the Tribes and Bands on September 1, 2011. **There has no attempt to further consult with the Tribes on this PA.**

TB1-16

Tribally there is major concern with the underground activity and expansion surface and subsurface in regards to the mine project. It has been reported to the Tribes that the white chert is being mined under ground and that things of religious significance are being disturbed underground.

TB1-17

Letter TB1 Responses Continued

TB1-11 spiritual needs and practices, but to find creative means in collaboration with the Western Shoshone to protect those practices. The results of these efforts are described within the PA, and will remain a vital piece in the on-going Tribal and/or future government-to-government consultation between the BLM and the governments of the Western Shoshone Tribes and Bands.

TB1-12 Comment noted. The statement defining the distance Tosawih quarried materials are found from the actual quarries is in relation to the distance from the quarries those materials are commonly found in archaeological sites in the form of tools or tool manufacture. It is not meant to imply either the size of the quarry or the limits of the aboriginal territory of the Western Shoshone people.

TB1-13 Comment noted. While the development of a consultation protocol between the BLM and any Tribal or Band government(s) is beyond the scope of this Project, a consultation protocol would be a welcome collaborative effort in its creation and use and will be gratefully and actively pursued by the Elko District BLM.

TB1-14 Comment noted. The purpose of the PA is to address how the Project will manage, avoid, monitor, and (if necessary) mitigate for effects to Historic Properties and TCPs. The PA is intended to address the Section 106 Process. The other issues raised by this comment are outside of the scope of the PA and would be addressed and resolved through the Tribal consultation and/or future government-to-government consultation process.

TB1-15 Comment noted. Government-to-government consultation activities and information sharing efforts are detailed in Section 3.17.1.3, Native American Consultation, of the DEIS. The BLM continues to engage in Tribal consultation and information sharing, and continues to request government-to-government consultation. An updated summary of the government-to-government consultation activities and informational sharing efforts have been included in the FEIS. The BLM summary notes from the DEIS public meeting in Owyhee, Nevada, also have been included in Appendix B of the FEIS.

TB1-16 Comment noted. The BLM has actively pursued consultation with all local Tribes and Bands. Numerous meetings have taken place with Tribal and Band governments (see FEIS, Table 3.17b). Government-to-government consultation activities and information sharing meetings are described in Section 3.17.1.3 of the DEIS. An updated summary of the government-to-government consultation activities and information sharing have been included in the FEIS. A copy of the PA has been included in Appendix A of the FEIS.

Letter TB1 Responses Continued

TB1-17 Comment noted. The white stone located within the underground workings is different in texture and composition than the white and colored stone found on the surface, known as "Tosawihi chert," Aipin, or Pisappin. Examples of the underground material (quartz vein material) can be made available for comparison with materials found on the natural ground surface. The "Tosawihi chert" material only reaches a depth of 100 feet below the natural ground surface, whereas the underground mine workings begin at approximately 500 feet below the natural ground surface, which is over 400 feet below any known existence of "Tosawihi chert" (DEIS, Section 3.17.2.1). Chert is a generic term for any microcrystalline, silica-rich sedimentary rock. There are several different origins of chert. The chert referred to as the "Tosawihi chert," found on the natural ground surface in the vicinity of the Hollister Project area, is from thick beds deposited at the surface as a result of the intrusion of silica-rich hot spring fluids. The "Tosawihi chert" and the quartz vein material are of different geologic ages and are found under different depositional conditions. The "Tosawihi chert" is the youngest of the cherts found in the area at approximately 15 million years in age. Although one should not identify a rock based solely on color, the "Tosawihi chert" is often milky white in color. However, addition of different chemicals present when the rock formed can lead to different colors of rock. The "Tosawihi chert" fluoresces and glows a brilliant green color under black light. Additionally, as noted above, this material was surficially deposited and is found only on the ground surface in the Hollister area. This material, as is evidenced by the artifacts and tools found both in the Hollister and surrounding areas, "fractures" in a certain way that distinguishes it, for example, as excellent toolstone material.

The underground quartz vein material, which is the mineralized zone in which the Hollister ore deposit is found, is a completely different rock type. For example, the underground material does not fluoresce under a black light. Although quartz contains silica, it is not a sedimentary rock like the "Tosawihi chert" described above. The white quartz found in the vein structures underground in the Hollister Project area is weak and filled with holes containing various chemical constituents and soft clay. Therefore, it is not suitable for tool-making.

Letter TB2



Written Statement Sheet Hollister Underground Mine Project Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

TB2-1 For the Hollister Mine Project the plan if we understand is to
be de-watering at 1,100 a minute into Rock Creek, and it is
said that there will be no impact downstream. Do we know what
will be in that water? At one time mercury was mined in that
area. Four to six springs will be directly affected by the
drawdown of water. How far out from the actual de-watering will
 TB2-2 the land be affected? It could be many miles not just the
hundred or so acres. Because of the proximity to Tosawih
Quarry it will be very hard to leave that area undisturbed.
 TB2-3 There will be people wanting to check out the old mines and all
the white rock. How will that area be policed?

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment – including PII – may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: Gerald Temoke and Doyle Tybo Title: Elko Band Council
 Mailing Address: 1745 Silver Eagle Drive
 City, State, Zip Code: Elko, NV 89801
 Phone: (775) 738-8889 Fax: (775) 753-5439 E-mail: grtebcchair@yahoo.com

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period July 16, 2012.

Thank you for your interest and participation!

Letter TB2 Responses

TB2-1 Comment noted. To clarify, RCG would not be discharging water directly into Rock Creek. Under the NPDES permit, RCG would discharge water directly into Little Antelope Creek. Little Antelope Creek is a tributary to Antelope Creek. Antelope Creek is a tributary to Rock Creek. Figure 3.6-4 of the DEIS illustrates the relationship between Little Antelope, Antelope, and Rock creeks. It is approximately 13 to 15 miles from the discharge point on Little Antelope Creek to the intersection of Antelope Creek and Rock Creek. The potential effects from groundwater discharges are described on pages 3.6-20 to 3.6-24 of the DEIS. The average discharge under the NPDES permit into Little Antelope Creek is estimated to be approximately 650 gpm, with occasional short-term elevated rates of up to 1,100 gpm (DEIS, page 3.6-20). The potential effects on surface water quality are described on pages 3.6-24 to 3.6-26 of the DEIS. The water discharged into Little Antelope Creek under the NPDES permit would be of good quality and would not require treatment prior to discharge (DEIS, page 3.6-25). The Proposed action states that RCG would continue “its current water management system of pumped water treatment prior to discharge into the rapid infiltration basins (RIBs).” (DEIS page 3.6-25). The Proposed Action creates additional procedures to supplement the current water commingling with mine water. The Nevada Division of Environmental Protection also can require additional water treatment measures if concentrations within Class C Standards for Rock Creek and its tributaries could be affected by the Proposed Action. (DEIS, pages 3.6- 25 to 3.6-26). Section 3.6, Surface Water Resources and Watersheds, of the DEIS describes the water quality of Little Antelope Creek, Antelope Creek, and Rock Creek. No change to the text of the FEIS has been made to address the comment.

TB2-2 Comment noted. To clarify, RCG would not be “dewatering” by actively pumping water at the Hollister Underground Mine Project. RCG would be removing groundwater seepage from the underground workings by collecting it in small impoundments and pumping it to the surface. Section 3.5, Groundwater Resources and Geochemistry, of the DEIS on page 3.5-1 describes the difference between the dewatering at other mines and the groundwater removal that would be conducted at the Hollister Underground Mine Project. Section 3.5, Groundwater Resources and Geochemistry, of the DEIS also describes the extent of the potential drawdown on the groundwater. The groundwater model indicates that the maximum extent of the 10-foot drawdown contour may extend approximately 7.9 miles from the underground workings. However, the drawdown impacts are not expected to affect the land surface. The potential effects of groundwater drawdown on surface

Letter TB2 Responses Continued

- TB2-2 (Cont) waters are described on pages 3.6-26 to 3.6-30 of the DEIS. Figures 3.6-4 and 3.6-5 in the DEIS in particular show the four spring complexes that would be potentially impacted by the drawdown. No change to the text of the FEIS has been made to address the comment.
- TB2-3 Comment noted. The Hollister Underground Mine Project, the Tosawihī Quarry, the TCPs, and the old (abandoned) mines referred to here are all on public lands. The Quarry, the old mines, and other resources have always been of public interest. The Project would not alter public interests in the old mines. Because the Tosawihī Quarries and TCP are located on public land administered by the BLM, the BLM would continue to monitor and patrol the area. These issues will remain open topics of future government-to-government consultation and discussion. No change to the text of the FEIS has been made to address the comment.

Letter N1



Our membership and services span the globe

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July 2, 2012

Bureau of Land Management
ATTN: Hollister Property
Janice Stadelman
3900 Idaho St.
Elko, NV 89801
BLM_NV_ELDOHollisterEISTeam@blm.gov

Re: Hollister Project Draft Environmental Impact Statement

Dear Ms. Stadelman,

N1-1

The Northwest Mining Association (NWMA) appreciates the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for Great Basin Gold’s Hollister Project in Nevada. The DEIS clearly shows Great Basin Gold is committed to building and operating a mine that will comply with all required environmental laws and regulations in addition to bringing new opportunities to Nevada and our Nation. NWMA wholeheartedly supports the Proposed Action in the DEIS and urges quick approval for the project.

Who We Are

NWMA is a 117 year old, 2,300 member, non-profit, non-partisan trade association based in Spokane, Washington. NWMA members reside in 43 states, including more than 500 in Nevada, and are actively involved in exploration and mining operations on public and private lands, especially in the West. Our diverse membership includes every facet of the mining industry including geology, exploration, mining, engineering, equipment manufacturing, technical services, and sales of equipment and supplies. NWMA’s broad membership represents a true cross-section of the American mining community from small miners and exploration geologists to both junior and large mining companies. More than 90% of our members are small businesses or work for small businesses. Most of our members are individual citizens. Great Basin Gold is an NWMA corporate member.

Approve the Hollister Mine

A healthy and vibrant domestic mining industry is indispensable to the economic and energy security of the United States. In fact, according to President Obama’s Council on Jobs and Competitiveness, mining is the only industry sector to have added jobs since December 2007. It’s time we embraced mining as a vehicle for new wealth creation and the high-paying jobs our country desperately needs.

N1-2

The Hollister Mine represents an excellent opportunity to create sorely needed jobs, generate federal, state and local tax revenue, jumpstart economic growth and help the U.S. become more self-reliant for our critical minerals needs.

Letter N1 Responses

N1-1 Comment noted.

N1-2 Comment noted.

Letter N1 Continued

N1-3 [The Hollister project will have a minimal disturbance footprint purposely planned to utilize previously existing disturbed areas where possible. In some cases, using reclaimed areas in order to not have to create new disturbance areas. Hollister is an underground mine, therefore the footprint on the surface is as compact as possible to minimize environmental impacts.

N1-4 [Since the project area lies within the Tosawihi Quarries Archaeological District, Great Basin Gold is taking a sensitive approach to the cultural resources of the area. Great Basin Gold has proposed no processing facilities in respect to the cultural sensitivity of the area. All ore will be processed at offsite facilities. The proposed action calls for partial backfill of an existing open pit, in response to feedback provided to Great Basin Gold.

N1-5 [Currently, the development of cultural resources Programmatic Agreement with BLM to establish procedures for compliance with, Section 106 is in progress. A proposed power line will decrease air emissions as the existing diesel-fired generators can be retired, eliminating an emission source of air.

N1-6 [Great Basin Gold is a strong example of environmentally responsible mining and will provide much needed economic and social benefits for many years. The Hollister will provide good-paying jobs for generations, and since mining is a temporary use of the land, after reclamation the land will be used for generations to come.

Mining is the beginning of the supply chain for everything we need and use. The Hollister project mine is located in an area steeped in mining history and rich with natural resources. Thus, it is important we seize the opportunity to responsibly mine this significant resource in Nevada.

Conclusion

N1-7 [Again, mining is at the beginning of the supply chain for virtually everything we use on a daily basis. The Hollister project will be an important contributor to that supply chain by providing high paying, family wage jobs in a foundational industry.] Mining has an indirect job multiplier that is twice the national average. It will provide jobs in support industries, local stores and restaurants and also provide jobs and the raw materials for people working in American industries that make the products society requires.

N1-8 [And, as the DEIS indicates, Great Basin will do this in the most environmentally responsible manner, complying with all environmental laws and regulations designed to ensure clean air, clean water and proper reclamation.] Overall, the positive environmental and economic benefits of this mine will be extensive not just in Nevada, but across the country.

The Hollister Project truly is a win-win. NWMA requests that you approve the Proposed Action and issue a final EIS and Record of Decision allowing the mine to be built.

Thank you for your consideration of our comments.

Sincerely,



Laura Skaer
Executive Director

Letter N1 Responses Continued

N1-3 Comment noted.

N1-4 Comment noted.

N1-5 Comment noted.

N1-6 Comment noted.

N1-7 Comment noted.

N1-8 Comment noted.

Letter N2

From: Cook, Clyne [<mailto:CCook@nvenergy.com>]
Sent: Thursday, July 12, 2012 4:02 PM
To: Stadelman, Janice R
Cc: mgingerich@nvenergy.com; Sheline, Laura; Simpkins, Lee; Teresa Connor (teresac@us.grtbasin.com)
Subject: RE: Hollister Mine Transmission Line Right-of-Ways

Hi Janice,

Here are our comments on the Hollister DEIS. Our comments are focused on our portion of the project, the 120kV Line.

N2-1 [

2.4.6.1 We will have steel cross arms, not wood
 We will use our standards, not RUS
 We will not own the substation
 Roads for construction will follow the transmission line where possible, however, due to the terrain, we will use overland travel and spur roads when necessary.

N2-2 [

2.4.10.6 We would like flexibility regarding Removal of the 120kV line. If we are serving future customers from this line, we don't want to be forced to remove upon mine closure.

As Lee mentioned today, we will be filing our application in the next few weeks that provide additional details on our portion of the project.

Please let me know if you have any questions.

Thanks so much,
Clyne

Letter N2 Responses

- N2-1 Comment noted. The NV Energy standards are substantially the same as the Rural Utilities Services (RUS) standards analyzed in the DEIS. The analysis corridor for the overhead transmission line was analyzed in the DEIS for both travel under or along the transmission line route and for spur roads being constructed or utilized via overland travel from the Antelope Creek Road, where necessary due to terrain. The summary and reference for NV Energy's Hollister Underground Mine Transmission Line Project Plan of Development has been included in the FEIS (Section 2.4.6.1, Addendum).
- N2-2 Comment noted. In accordance with applicable regulations, the BLM would issue the ROW to NV Energy for a specified term. All BLM ROWs can be renewed upon a timely application subject to the applicable regulations for a ROW at the time of possible renewal. The ROW would be evaluated at the end of the Project life and during NV Energy's possible renewal periods for continued use or removal. Whether or not the BLM would grant a future renewal of the ROW is speculative, and therefore, the impacts associated with the initial ROW application were analyzed in the DEIS. No change to the text of the FEIS has been made to address this comment.

Letter N3

From: Ray Bacon [<mailto:raybacon@clearwire.net>]
Sent: Monday, July 16, 2012 2:09 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject: The Hollister Mine permit

Gentlemen:

N3-1 [I run the Nevada Manufacturers Association in in my view it is critical to get our mineral development in this
N3-2 nation healthy in order to have a competitive manufacturing sector. Admittedly this project is a gold operation
N3-3 so the impact is a little less than from other minerals. However, it is essentially no further disturbance beyond
the existing pit. Approval should be an easy decision and we urge your do do so.

--
Ray Bacon
Nevada Manufacturers Assn
775-882-6662
cel 775-771-8550
nma@nevadaweb.com

Letter N3 Responses

N3-1 Comment noted.
N3-2 Comment noted.
N3-3 Comment noted.

Letter N4



Working with Communities to Protect Their Land Air and Water

85 Keystone Ave., Suite I, Reno, NV 89503
775-348-1986, www.gbrw.org

July 16, 2012

Bureau of Land Management
attn: Janice Stadelman
Hollister Underground Mine Project Coordinator
3900 East Idaho Street
Elko, NV 89801
janice_stadelman@blm.gov

Re: draft EIS for Proposed Hollister Underground Mine

Dear Ms. Stadelman,

Great Basin Resource Watch was not able to fully review the draft EIS (DEIS) by the comment date, but below are some foremost concerns. We will send more detailed comments later in July, 2012, and request that the BLM consider those as well.

Water Quality

N4-1 Historical contamination remains a problem at the Hollister site with constituent levels observed in the *DGW-1R* well in exceedance of standards. Surface water monitoring in Little Antelope Creek indicates that the mine site may be impacting the water quality as well. There is a significant increase in TDS (total dissolved solids) from monitoring point GBG-02 to GBG-03 (110 to 900 PPM), where flow from the drainage containing MA-1 seep intersects Little Antelope Creek. MA-1 seep is shown as having TDS of 1,400 PPM (DEIS – Fig. 3.5-11). At this point GBRW did not see mitigation to arrest this contamination problem.

N4-2 According to the analysis discussed on pages 3.5-33-34 of the DEIS the proposed action for the West Pit Waste Rock Storage Facility (WRSF) will assure a flow-through condition within the old pit footprint for the perched aquifer. This aquifer is a “water of the State” and there is significant evidence that it will become degraded as it flows through the former pit. Water samples from seasonal ponded water on the West Pit, and from P1 monitoring well show degradation and acid rock conditions. Although, there may already be a violation of state law the proposed action would seem to guarantee that the “waters of the State” will be degraded. The hydrological analysis in the DEIS indicates that the perched aquifer is not connected to the bedrock aquifer and surface water. However, this conclusion could be in error and there needs to be sufficient monitoring to assure that surface water is not additionally contaminated by the West Pit WRSF. There needs to be a mitigation plan to avoid contamination of the perched aquifer and potentially Little Antelope Creek from the West Pit WRDF.

N4-3

N4-4

*Working with Communities to protect their Land, Air and Water
Great Basin Resource Watch is a tax-exempt (501(c)3) organization*

Letter N4 Responses

- N4-1 Comment noted. The identified water quality exceedences in surface water along lower Little Antelope Creek and in some wells originate from historical operations at the site from a previous mine operator. They are part of the existing environment. The DEIS notes that most of the time, the MA-1 seep is dry, and that the TDS at GBG 03 noted in Figure 3.5-11 (DEIS) on a single date in April of 2009 is below TDS limits. Further, this figure was intended to provide a snapshot in time, and must be read together with Table 3.6-4 (DEIS), which provides multiple temporal data points. Looking at the TDS data from GBG-02, MA-1 Seep, and GBG-03 as a whole over time, it is not logical to conclude that the fluctuations in TDS at GBG-03 are caused by the MA-1 seep. The Monitoring and Mitigation Plan is included in Appendix C of the FEIS.
- N4-2 Comment noted. As clarification to the understanding of the effects of the proposed West Pit WRSF on shallow groundwater in the West Pit, it should be noted that a flow-through condition currently exists when the groundwater surface elevation falls below the bottom of the West Pit. The evaporative sink the pit lake creates ceases to control groundwater flow. The West Pit lake has been dry since late summer of 2009. DEIS Appendix B4 also discusses the isolation of the pit floor from incident precipitation by the presence of the proposed West Pit WRSF. A portion of the precipitation that currently falls on the floor of the West Pit likely percolates through the pit floor to the shallow groundwater, a condition that would be reduced by the construction of the WRSF and could reduce flow-through volumes.
- N4-3 Comment noted. It is unclear what the commenter’s intent is in referring to the “bedrock aquifer.” The BLM assumes that “bedrock aquifer” refers to the Vinini regional aquifer. The aquifers are hydrologically isolated by a clay zone as documented by the monitoring wells (DEIS, Section 3.5, Groundwater Resources and Geochemistry). See Appendix C, Monitoring and Mitigation Plan.
- N4-4 Comment noted. Contamination in the perched aquifer is historic contamination. The presence of the West Pit WRSF would only affect the groundwater flow-through relative to periods when the groundwater surface elevation is sufficiently high to create a pit lake (which has not occurred since the summer of 2009) and associated evaporative sink. Otherwise, the flow-through would be unchanged or possibly reduced by the presence of the West Pit WRSF. See Appendix C, Monitoring and Mitigation Plan.

Letter N4 Continued

N4-5 The DEIS predicts that after mine closure of the underground workings will degrade groundwater (pages 3.5-34 through 3.5-37). The mitigation strategy for this is essentially wait and see. Analysis in the DEIS concludes that natural dilution will solve the problem at the boundary of the project. First, there is no such restriction in contaminating the “waters of the State” to a project boundary, so the DEIS is predicting a violation of state law. Second, the analysis is quite uncertain as mentioned in the DEIS, so an active mitigation strategy needs to be developed in advance to avoid degrading ground water.

Mercury Analysis

N4-6 The discussion of potential mercury emissions is brief and insufficient. Ore samples need to be analyzed for mercury content, and there should be a plan for continued ore testing for mercury as mining proceeds. The DEIS indicates that emissions from Hollister ore at Newmont’s Midas Operations are expect to result in less than 7 lbs per year, and it is unclear if emissions from Hollister ore at Esmeralda would also result in 7 pounds of mercury per year or that the mill is constrained to that amount of emissions per year. The EIS needs to include the analysis connecting the mercury content in the ore to emissions at the mills.

N4-7 In addition to stack emissions the EIS should contain a fugitive mercury emission analysis. Once the mercury content of the ore, waste rock, tailings is determined then an estimate can be made of the fugitive emissions at the Hollister site and the mill sites. This was done in the Cortez Hills EIS.

Cultural/community related issues

N4-8 The Hollister mining area is also a significant Western Shoshone cultural site, including the Tosawihi quartz quarry. It appears as though there are still concerns among the Western Shoshone about the cultural impacts of the mine to this area. In the American Indian Religious Freedom Act (AIRFA), Congress stated that “[i]t shall be the policy of the United States to protect and preserve for American Indians their inherent freedom to believe, express, and exercise the traditional religions.” 42 USC § 1996 (1982). It is not clear that the BLM in preparing the DEIS has fulfilled its charge in this regard.

N4-9 Given what GBRW has reviewed of the DEIS it is our conclusion that the document is still incomplete, and we hope that these concerns as addressed in the final EIS.

Sincerely,



John Hadder
Director

Letter N4 Responses Continued

N4-5 Comment noted. Modeling results provided in the DEIS indicate that concentrations of groundwater constituents predicted to exceed groundwater quality standards within the refilled mine workings would eventually flow in the Vinini aquifer toward the southwestern Project boundary and attenuate to levels at or below groundwater quality standards within approximately 1.5 miles downgradient of the refilled Hollister Mine underground workings. No receptors (e.g., wells, springs, streams) of groundwater from the Vinini aquifer have been identified downgradient of the Hollister Site. Monitoring and mitigation would be required. See Appendix C, Monitoring and Mitigation Plan.

N4-6 Comment noted. The DEIS recognizes that mercury was historically mined in the region. The DEIS analyzes both global mercury emissions and local mercury emissions, and determines the Proposed Action, which includes mining and processing of ore, would “result in a negligible cumulative increase in mercury” (DEIS, page 3.19-21).

The DEIS accurately explains the nature of mercury emissions, placing the environmental fate and potential for mercury emissions from mining and mineral processing into important context. The DEIS states correctly that “[w]hen bound in mineral forms that typically appear in ore (e.g., cinnabar), mercury is a stable compound that remains in solid form” and that mercury is only liberated through dissolution in process solutions or through thermal processes in the form of reactive gaseous mercury (RGM). The latter form of mercury is the primary concern. The mercury emissions impacts from processing at the Midas and Esmeralda mills have been assessed; they have been found to be insignificant. Both mills hold mercury operating permits under the Nevada mercury Maximum Achievable Control Technology (MACT) Program.

Under the maximum collective mercury emissions allowed under both the Esmeralda and Midas permits, mercury emissions are anticipated to be approximately 14 pounds/year or less. Given the extremely low mercury content in the Hollister ore, the Project would cause no increase to this emissions rate, regardless of the MACT cap. The two mills may actually experience a decrease in emissions because the Hollister ore contains so much less mercury per unit volume of ore than other ores. For example, the most recent data from the Nevada MACT Clearinghouse for emissions from the retort unit in October 2009 at the Midas Mill indicates an average ore content of mercury of 141 parts per million (ppm) (nearly 500 times higher than the content from the Hollister Site, which is approximately 0.275 ppm). Test data from other units in other years show much higher mercury content than 141 ppm. For example, the MACT Clearinghouse retort data from 7/15/2008 (Midas Mill unit) indicates a mercury ore content of 1,212 ppm. Thus, the

Letter N4 Responses Continued

- N4-6 (Cont) DEIS's conclusion that additional modeling is not required with respect to mercury emissions from these mills as a result of this Project is both accurate and sufficient.
- Emissions from the Midas and Esmeralda mills from processing ore from the Hollister Site would not add any significant or likely detectable emissions in the region of the Carlin Trend, and could result in lower emissions than if other ore were processed at those facilities, as noted above.
- Continued testing of mercury ore content from the Hollister Site is not necessary. The mercury content for the ore is remarkably consistent. Further, this is confirmed by the mercury testing of both the ore and waste rock that is conducted quarterly under the NDEP Water Pollution Control Permit (NEV 2003107) for the Hollister Project. No change to the text of the FEIS has been made to address this comment.
- N4-7 Comment noted. The potential mercury emissions from the Project are negligible, due largely to the fact the Hollister Site is a narrow vein, underground mine that would produce high grade ore from one formation, as opposed to multiple formations mined via open pit methods at the Cortez Hills mine. Thus the Hollister Site has a consistent mercury content. The mercury content of the Hollister ore (~0.275 ppm) is one-thousand (1,000) times less than the mercury content of the refractory ore at Cortez Hills (~245 ppm). For these reasons, comparison with the Cortez Hills Supplemental Environmental Impact Statement (SEIS) is inappropriate.
- Mercury in the form of particulate matter, which together with RGM accounts for less than 2 percent of mercury air concentrations, is generally Particle-bound mercury is relatively stable and is not easily converted to methyl mercury (USEPA 1997). The controls already in place to address fugitive particulate emissions at this site, combined with the very low concentration of mercury in the Hollister ore, and the extensive controls for mercury under existing permits at both mills, result in virtually no increased mercury emissions. Therefore, there would be no expected mercury emissions impact from the Proposed Action.
- At the Hollister Site, particulate emissions associated with transport would be: 1) controlled and 2) miniscule. As the DEIS notes in Section 3.19.2.1, Air Quality, Proposed Action, particulate emissions from fugitive dust would be mitigated in several ways, including through the minimization of drop heights during loading, and the implementation of dust suppression measures, including a Fugitive Dust Control Plan. Further, because it is high grade, the ore does not accumulate for any appreciable length of time (typically a matter of days) prior to being

Letter N4 Responses Continued

- N4-7 (Cont) loaded into transport vehicles, which would then be covered during transport to the mills. No change to the text of the FEIS has been made to address this comment.
- N4-8 Comment noted. The Proposed Action allows for the Western Shoshone people to access the Tosawih Quarries area on their own. The Proposed Action allows for the Western Shoshone people to believe, express or exercise traditional religious activities. The BLM continues to provide information sharing and conduct consultation with the Tribal Councils, which complies with American Indian Religious Freedom Act (AIRFA). The PA is included in Appendix A of the FEIS.
- N4-9 Comment noted.
- Note: The BLM did not receive any further comments from Great Basin Resource Watch (GBRW).

Letter TO1

**Bureau of Land Management
Elko District
Scoping Comment Card**



Date: 7-16-2012
Project: Hollister Underground Mine Project

Please check your affiliation below:

<input checked="" type="checkbox"/> Individual
<input type="checkbox"/> Private Organization
<input type="checkbox"/> Federal, State or Local Government
<input type="checkbox"/> Citizen's Group
<input type="checkbox"/> Elected Representative
<input type="checkbox"/> Regulatory Agency

BUREAU OF LAND MANAGEMENT
ELKO DISTRICT
2012 JUL 16 AM 11:09

Name: FELIX ILE
Organization (if applicable): Tribal Member
Street Address (optional): 1949 Circle Way
City/State/Zip (optional): ELKO, NV. 89801

If you wish to provide written comments, please write your comments below (use back, if needed). Written comments may be submitted using this card, an e-mail, or any other written format provided to the BLM.

Comments: Primary concern is cultural resources and Native American traditional values. The underground project is so close to the Tosawiki Quarry and TCP location. So much disturbance and destruction to the site and areas adjacent need much more study and dialogue with the Western Shoshone people before the Bureau of Land Management could consider the project to move forward, this notice will be followed up with a complete description of our concerns by the end of this week (7/16-7/20/12), please consider this request. Thank you. Felix Iile

Please provide your comments to a BLM member or leave at front desk.

Letter TO1 Responses

TO1-1 Comment noted.

TO1-2 Comment noted. The BLM acknowledges that visible impacts to the Tosawihi Quarry area have occurred over many years. Exploration and mining in this area began prior to the implementation of the Surface Management (43 CFR 3809) regulations in 1981, and have continued in the area since the implementation of these regulations. To date, this area has not been withdrawn from mineral entry, thereby allowing entities to stake unpatented mining claims for locatable minerals. Therefore, entities with active unpatented mining claims have a right to prudently explore their claims in an effort to make a discovery. After a discovery has been made, the entity has the right to mine the commodity in a prudent manner. In the DEIS, the BLM acknowledges potential effects to Native American Traditional Values, including the Tosawihi Quarries Archaeological District and TCP (DEIS, Section 3.17). In compliance with NEPA and the NHPA, the BLM has consulted through the government-to-government process and information sharing with the affected governments of federally recognized Indian Tribes and Bands (DEIS, Section 3.17.1.3, Native American Consultation, Table 3.17-1 and the revised Table 3-17b. As a result of this consultation, the DEIS identifies and discusses the potential impacts the Proposed Action may have on Native American Traditional Values (DEIS, Section 3.17.2.1, Proposed Action). The DEIS also states that any adverse effects to a site of Tribal concern would be mitigated through the procedures stated in the PA among the BLM, Nevada SHPO, ACHP, and RCG (DEIS, page 3.17-8). Further actions and potential actions are included in the Monitoring and Mitigation Plan, Appendix C of the FEIS. The local Tribe and Band governments have received copies of the PA. A copy of the PA is included in Appendix A of the FEIS.

Note: The BLM received no further comments from Mr. Iile.

TO1-1

TO1-2

Letter TO2



Written Statement Sheet Hollister Underground Mine Project Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

July 16, 2012

TO2-1

Elko District office
To be on record.
I'm totally against Hollister
Gold Mine Proposal.

TO2-2

I'm a Western Shoshone Elder
from the Tosa Wiki Band.
This area is a sacred, Holy site
that our ancestors came to pray
and heal their people thousands

TO2-3

of yrs. Ago and Present. The chert,
Aipin and Pisappin found on surface
and deep underground are sacred
to the Western Shoshone and should not
be destroyed.

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment - including PII - may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: Shaina Reno Title: Western Shoshone Council member
Mailing Address: P.O. Box 192
City, State, Zip Code: Orvick, NV - 89832
Phone: 775-757-1259 Fax: _____ E-mail: _____

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period July 16, 2012.

Thank you for your interest and participation!

Letter TO2 Responses

- TO2-1 Comment noted.
- TO2-2 Comment noted. The BLM acknowledges the importance of the Tosawihi Quarries and TCP area to the Western Shoshone people. As stated in DEIS Section 3.17.4, certain impacts cannot be fully mitigated to the satisfaction of the Tribes. DEIS Section 3.17.2.1 defines possible mitigation measures to lessen impacts and states that "Adverse effects to religious, spiritual, or sacred values cannot be monitored or mitigated." This issue is addressed within the PA, the Monitoring and Mitigation Plan, and will continue to be addressed within on-going future government-to-government consultation and will be monitored utilizing cultural contractors and Tribal monitors. No change to the text of the FEIS has been made to address this comment.
- TO2-3 Comment noted. The Tosawihi Chert, Aipin, and Pisappin are all located within either the Tosawihi Quarries or TCPs and are therefore managed under NHPA regulations. None of these materials would be mined or are within areas that would be impacted by mining operations or exploration activities. See response to comment TB1-17 for additional information regarding the Tosawihi Chert material, its characteristics, and where it is found. No change to the text of the FEIS has been made to address this comment.

Letter P1

From: keakaha@gmail.com [mailto:keakaha@gmail.com]
Sent: Thursday, June 28, 2012 11:56 AM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Attn: Janice Stadelman; Hollister EIS

Thank you for the presentation at the Elko Field Office last night. It is obvious that a tremendous amount of time and energy has been spent to analyze the Hollister project for environmental impacts. It has a very clear focus on maintaining a reduced footprint, and has a management plan for the waste rock that takes into account the geochemistry of the materia, and provide proper controls.

P 1-1 It is good to see projects such as Hollister move forward. Hollister represents the ideal that the US, and Nevada in particular, is the leader in safe and environmentally sound mining. The ideal that mining can continue to provide living wage jobs to the people of Nevada, and support the national economy in the proud role as producers.

Thank you,

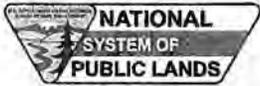
Jessica Spiegel
1370 Sagecrest Dr. Apt 196
Elko, NV 89801

Letter P1 Response

P1-1 Comment noted.

Letter P2

Letter P2 Responses



Written Comment Sheet Hollister Underground Mine Project Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

P2-1 *I have worked for Great Basin Gold since they started on this project. Because of them, I have a good paying job with benefits. That is a big thing as I'm 63 yrs old. Many mining companies would replace me with someone much younger. I really appreciate that my son is employed at Hollister. He is able to provide health care and all other needs for his family.*

P2-2

P2-3 *Great Basin Gold supports the community by donating money, in kind donations and supporting local charities. They should finish this part of the ventan*

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment - including PII - may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: Arlene Luen Title: _____
 Mailing Address: 3276 Marla Dr.
 City, State, Zip Code: Winnemucca, NV 89445
 Phone: (775) 625-7500 Fax: _____ E-mail: _____

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period July 16, 2012.

Thank you for your interest and participation!

- P2-1 Comment noted.
- P2-2 Comment noted.
- P2-3 Comment noted.