

US EPA ARCHIVE DOCUMENT



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

11/13/12

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

Subject: Mount Hope Project Final Environmental Impact Statement (EIS), Eureka County, Nevada [CEQ #20120321]

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 Final EIS, the proposed Mount Hope molybdenum mine would directly disturb 8,355 acres of land, most of which is managed by BLM. It would have an active operating life of 44 years, followed by 30 years of reclamation, and five years of post closure monitoring; after which long term water management may be necessary for an undisclosed number of years in order to prevent significant degradation of water resources. The proposed project would also consume up to 11,300 acre feet per year of groundwater during ore processing, resulting in potential adverse impacts to 22 perennial springs and 2 perennial streams. The FEIS indicates that the project may result in the loss of miles of perennial waters, and impairment of wildlife, livestock, and human use. Based on the information provided in the FEIS, EPA believes that, unless adequate provisions are made to mitigate impacts to water quality and quantity for the duration that they may occur, the project may also result in contamination of groundwater.

On March 28, 2012, EPA rated the Draft EIS for the Mount Hope Project as "EO-3". Our objections were based primarily upon the likelihood that surface water and groundwater resources would be significantly and adversely affected and that proposed monitoring and mitigation measures did not provide sufficient assurance that the project's potential impacts could or would be mitigated. EPA found the Draft EIS to be inadequate because it lacked critical information regarding essential post-closure activities, as well as the estimated costs of these post-closure obligations, and the nature and adequacy of the funding mechanism.

We appreciate the efforts made by the BLM and its staff to work with EPA to resolve the issues and concerns that we have raised throughout the NEPA process for this project. EPA notes that the Final EIS contains a number of important changes and improvements. For example, in regard to the monitoring and mitigation plans for surface water resources, the mitigation triggers for

surface water impacts have been modified from “cessation of flow” to “reduction in flow”, as we had recommended. The Final EIS also clarifies that the water supply for any necessary surface water mitigation would come from Eureka Moly LLC’s current groundwater allocation until such time as additional water supply can be identified. We appreciate this clarification, although we remain concerned about the secondary impacts of such mitigation, which the FEIS does not address.

With regard to a number of other important issues, EPA finds that the Final EIS does not contain revisions responsive to the comments provided on the Draft EIS. In particular, the discussion regarding post-closure financial assurance requirements remains far too general and the EIS continues to lack a quantitative discussion of the trust fund requirement. As a result, the Final EIS does not adequately disclose information critical to determining the project’s long term environmental consequences. For this reason, EPA finds the Final EIS to be unresponsive to our comments and we continue to recommend that the EIS be formally supplemented to address our previous comments. Please refer to our March 28, 2012 comments on the DEIS for specific recommendations regarding financial assurance. We also have continuing objections regarding water monitoring and mitigation, and concerns about air quality, which are discussed further in the enclosed Detailed Comments.

Throughout our discussions, it has been apparent that BLM and EPA agree that adequate financial assurance at mines is important to safeguard the environment and taxpayers. We appreciate the BLM’s willingness to share information regarding the long term funding mechanism with EPA outside of the NEPA process, and we understand that the BLM also intends to publish this information in the Record of Decision for this project. We look forward to the opportunity to review this information and provide technical feedback to the extent possible. Nevertheless, EPA continues to strongly believe that the adequacy of financial assurance is a critical element to be addressed earlier in the NEPA process so that the potential environmental and fiscal consequences of the proposed project are disclosed to the public. As you know, BLM Nevada did provide financial assurance information in the 2002 EIS for the Phoenix Mine, which included approximate annual engineering costs and the amount of seed money needed to generate sufficient funds into the future to satisfy the cost estimate.

We will continue to work with BLM at the national and regional levels to seek resolution of our disagreement regarding the disclosure of financial assurance information in NEPA documents, as well as interagency agreement on what constitutes adequate financial assurance for hard rock mining operations.

We look forward to working with you to resolve these issues. In the meantime, if you have any questions about the above comments, please call me at (415) 972-3843 or have your staff contact Carter Jessop, our lead NEPA reviewer for this project, at (415) 972-3815.

Sincerely,

/s/

Enrique Manzanilla, Director
Communities and Ecosystems Division

Enclosures:

(1) EPA's Detailed Comments on the Mount Hope FEIS

cc: Doug Furtado, BLM-Battle Mountain District Office
Colleen Cripps, Nevada Division of Environmental Protection
Alan Jenne, Nevada Division of Wildlife
Lee Kreutzer, National Park Service
Eureka County Board of Commissioners

Mount Hope Project Final Environmental Impact Statement EPA Detailed Comments

Water Monitoring and Mitigation

In our comments on the Draft EIS, EPA raised major concerns regarding the project's potential impacts to groundwater and surface water quality. We noted that both the potentially acid generating (PAG) waste rock disposal facility (WRDF) and the non-PAG WRDF have the potential to release contaminated seepage into the environment if adequate controls are not put in place and maintained appropriately. The tailings storage facility (TSF) similarly has the potential to release numerous constituents at concentrations above Nevada Profile 1 water quality criteria into the groundwater system if drain-down solutions are not properly managed. We provided specific recommendations for surface water and ground water quality monitoring that would help to ensure that any unforeseen releases of contaminated water would be identified as soon as possible.

The Final EIS contains little revision from the Draft to address the above concerns. In its Response to Comments (Vol III, p. 422), the BLM states that the Bureau of Mining Regulation and Reclamation "has responsibility for groundwater protection in the State of Nevada and would require appropriate monitoring pursuant to the Water Pollution Control Permit". The additional Response to Comments sections that reference EPA's water quality concerns similarly lack substantive justification for why additional information regarding potential water quality impacts, monitoring, and mitigation for such impacts are not provided in the Final EIS. Future issuance of a Water Pollution Control Permit by the State does not obviate the need for the EIS to provide the information necessary to assess the likelihood and extent to which impacts to groundwater quality would be identified and managed appropriately. EPA continues to believe that information such as location, sampling frequency and action thresholds for water quality monitoring and mitigation is necessary to support a determination that any potential contamination produced by the project would be identified and remediated in a timely manner.

The Final EIS indicates that EML will remain financially responsible for mitigating any additional impacts associated with the project that may be identified during the operations or closure phases of the project. This clearly requires that accurate and comprehensive monitoring data are available with which to determine whether revision of any mitigation plan or the long term funding mechanism (LTFM) is required. Without additional disclosure of the water quality monitoring requirements for the project, it is unclear whether or not sufficient data will be available to ensure that operation and post closure mitigation will cover all necessary costs and maintenance activities necessary for environmental protection.

Recommendation: The Supplemental Final EIS or Record of Decision (ROD) should include, as an appendix, the Mount Hope Project Water Pollution Control Permit, as well as a summary of the permit requirements, a description of any additional monitoring and mitigation measures that would be employed, and a discussion of how monitoring data would be used to revise the long term trust fund for the project, if such revision became necessary. For EPA's specific recommendations regarding monitoring activities for this project, please see our detailed comments on the Draft EIS.

In regard to water quantity, the Final EIS indicates that Eureka Moly LLC (EML) would only be responsible for mitigating a reduction in base flow of the perennial waters the project may affect, as only base flows would reasonably be impacted by the extraction of groundwater by the project (Volume 11, p. 452). It is not clear whether the potential for groundwater extraction to result in increased infiltration that could impact peak flows was considered.

Recommendation: The monitoring and mitigation plan should be implemented such that BLM's assumption that groundwater extraction would only impact base flows is regularly tested. Monitored peak flow data should be regularly compared to historic data and, should peak flows show a reduction that is concurrent with groundwater extraction and in excess of the reduction in base flow contributions, the mitigation plan should be revised and EML's requirements in regard to water contributions should be increased accordingly.

Section 3.2.3 of the Final EIS indicates the approximate environmental impact associated with the implementation of the proposed surface water quantity mitigation measures. The impacts identified only consider surface disturbance for infrastructure construction. The Final EIS states that the water supply for the up to 302 acre feet per year (afy) of mitigation water would come from EML's current groundwater allocation of 11,300 afy until an alternative source for this water is identified. It is likely that any alternative source would also be groundwater. The Final EIS does not discuss the additional impact that this mitigation would have upon groundwater levels should the entire 302 afy be supplied by groundwater extraction in excess of EML's current allocation.

Recommendation: The Supplemental FEIS or ROD should include the results of revised groundwater modeling showing the additional groundwater drawdown impacts that would result from the up to 302 afy of additional groundwater extraction required to replace lost surface water flows. Alternatively, it should include a restriction that all mitigation water be diverted from EML's existing 11,300 afy water rights.

Air Quality

In modeling the project's potential impacts to air quality resources, the Draft EIS used monitor locations in Boulder City, Nevada and Jean, Nevada to provide background concentrations for the criteria pollutants CO, NO₂, and SO₂. The Final EIS, however, substitutes a value of zero for CO, NO₂, and SO₂ (1-hour and 3-hour) background concentrations. We understand that the citations provided for this change are personal communications with two individuals at the Nevada Bureau of Air Pollution Control on March 19, 2007 and March 19, 2008. EPA is concerned that a background concentration of zero for these pollutants may be too low to be accurately representative. As we have discussed with BLM project staff, we believe that it would be preferable to, instead, identify a number of existing monitoring sites and provide a rationale for choosing the one that is most representative of the project area's conditions, considering the density of emission sources, the terrain, and meteorological factors. We appreciate BLM's verbal agreement to do this.

Recommendation: The BLM should examine whether a more appropriate monitor location exists, considering the density of emission sources, terrain, and meteorological factors. If such a location can be identified, the BLM should consider whether the use of CO, NO₂, or SO₂ background concentrations from this monitor location would affect the potential significance of

the project's air quality impacts. If so, the Supplemental FEIS or ROD should disclose this change in impact significance and consider whether mitigation would be appropriate to control emissions of the pollutant(s) of concern.