

### Working with Communities to Protect Their Land Air and Water

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December 17, 2012

Ms. Amy Lueders, Nevada State Director Bureau of Land Management 1340 Financial Blvd., Reno, NV 89502

Re: Request for State Director Review on the Mount Hope Molybdenum Mine in Eureka County Nevada

Dear Ms, Leuders,

Great Basin Resource Watch (GBRW) and the Western Shoshone Defense Project requests your review of the decision to approve the plan of operations and approval of issuance of right-of-way (ROD) to the Mount Hope Project (hereafter the Project) that was approved by the Bureau of Land Management (BLM) Mount Lewis Field Office, November 16, 2012. This request is made pursuant to the provisions at 43 CFR § 3809.805.

Requests for state director review must be received "no later than 30 calendar days" after the affected party receives or is notified of the BLM decision, pursuant to the provisions of the hard rock mineral regulations at 43 CFR § 3809.804. GBRW received the ROD of the Project by mail on November 19, 2012, which allows this petition to be filed no later than December 19, 2012. The announcement regarding the release of the Mount Hope Record of Decision (ROD) that was posted on the Mount Lewis BLM's website after October 19, 2012. The ROD was signed on October 16, 2012. Thirty calendar days after the signing of the ROD occurs on December 16, a Sunday. If a deadline falls on a Sunday, GBRW requests must be received by the following business day, or Monday, December 17, in this case. Therefore, we are submitting this state director review request in a timely manner.

Petitioner Great Basin Resource Watch is a nonprofit organization based in Reno, Nevada that is concerned with protecting the Great Basin's land, air, water, wildlife and communities from the adverse impacts of resource extraction including hardrock mining. GBRW is a coalition of environmentalists, ranchers, and Native Americans dedicated to reforming the hardrock mining industry and the agencies that regulate them to protect the land, air, water and Native American resources of the Great Basin. Members of GBRW have used, enjoyed, and valued the area of the proposed Project for many years. Some members of GBRW live near the project and rely on access to clean water, and air for their livelihood as agriculturists. In addition they hike, view and photograph wild plant and animal life, and generally enjoy using the area of the proposed project for recreational and aesthetic purposes. Members of GBRW intend to continue these visits and uses in

the coming year and beyond. These uses will be adversely affected by the Project as proposed. GBRW submitted comments to the BLM regarding scoping, the draft EIS, and the final EIS for the Project.

Petitioner Western Shoshone Defense Project (WSDP) was created in 1991 under the direction of the Western Shoshone National Council, a traditional government of the Western Shoshone people. Its mission is to protect and preserve Western Shoshone rights and homelands for present and future generations based upon cultural and spiritual traditions. WSDP staff operate under the guidance of acting director Carrie Dann, the Western Shoshone National Council, whose members represent various Western Shoshone communities and organizations, and a Community Advisory Board with members from five Western Shoshone communities.

Great Basin Resource Watch challenges the ROD and Final EIS<sup>2</sup> (FEIS) on three main grounds: (1) BLM failed to prevent "unnecessary or undue degradation" of public land resources, as required by the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. 1732(b), and BLM's implementing regulations at 43 CFR Part 3809, when it approved the Project; (2) the FEIS/ROD is based on incorrect and unsupportable assumptions and positions regarding Eureka Moly, LLC's (EML) alleged "statutory right" to have the project approved under the mining law; and (3) BLM violated the National Environmental Policy Act ("NEPA"), 42 U.S.C. 4321 et seq.

### Background on the Project<sup>3</sup>

The Project will be located in Eureka County, Nevada approximately 23 miles northwest of the town of Eureka, Nevada and will consist of a proposed molybdenum mine including a power transmission line, a water well field, and all associated facilities to be located on public land administered by the BLM Mount Lewis Field Office and on private land controlled by EML. The Project will utilize an open pit mining method and will process the mined ore using a flotation and roasting process. A total of 8,355 acres of disturbance is proposed within the 22,886-acre Project Area. The Project will have an active mine life of 44 years, followed by 30 years of reclamation, and five years of post closure monitoring. The proposed project would consume up to 11,300 acre feet per year of groundwater.

The 80-year Mount Hope Project would have an 18- to 24-month construction phase, 44 years of mining and ore processing, 30 years of reclamation, and five years of post-closure monitoring. There would be no concurrent reclamation during the first 15 years of the Mount Hope Project. The years of operation presented in the Environmental Impact Statement are anticipated; however, there is a potential that the timing of the implementation or duration of components of the Mount Hope Project could vary. The Mount Hope ore body contains approximately 966 million tons of molybdenite (molybdenum disulfide) ore that would produce approximately 1.1 billion pounds of recoverable molybdenum during the ore processing time frame. Approximately 1.7 billion tons of waste rock would be produced by the end of the 32-year mine life and approximately 1.0 billion tons of tailings would be produced by the end of the 44 years of ore processing. Optimal development of the molybdenum deposit to meet the market conditions and maximize molybdenum production would utilize an open pit mining method and would process the mined ore using a flotation and roasting process. The location of the waste rock disposal facilities, the tailings disposal facilities, and the mill and roasting facilities adjacent to the open pit would be the most efficient location to meet Eureka Moly LLC's needs for the Mount Hope Project.

The Mount Hope Project would consist of the following: a) an open pit with a life of approximately 32 years and associated pit dewatering; b) waste rock disposal facilities where waste rock would be

segregated according to its potential to generate acid rock drainage; c) milling facilities including a crusher, conveyors, semi-autogenous grinding and ball mills, flotation circuits, concentrate dewatering, ferric chloride concentrate leach circuit, and filtration and drying circuits that would operate for approximately 44 years; d) a molybdenite concentrate roaster and packaging plant to package the technical grade molybdenum oxide in bags, cans, or drums; e) a ferromolybdenum plant for production of ferromolybdenum alloy using a metallothermic process and separate packaging plant for drums and bags; f) two tailings storage facilities and associated tails delivery and water reclaim systems; g) an ongoing exploration program utilizing drilling equipment, roads, pads, and sumps; h) Low-Grade Ore Stockpile that would feed the mill after mining ceases; i) water supply development with associated wells, water delivery pipelines, access roads, and power in the Kobeh Valley Well Field Area; j) a 24-mile, 230-kilovolt electric power supply line from the existing Machacek substation, with a substation and distribution system located in the Project Area. The powerline would join the existing Falcon-Gondor 345-kilovolt line right-of-way near the Town of Eureka and follow the existing utility corridor to the Project Area; k) a realigned section of the existing Falcon-Gondor powerline, which would require the filing of a separate right-of-way amendment at the time it is needed (near Year 36); l) ancillary facilities including haul, secondary, and exploration roads, a ready line, warehouse and maintenance facilities, storm water diversions, sediment control basins, pipeline corridors, reagent and diesel storage, storage and laydown yards, ammonium nitrate silos, explosives magazines, fresh/fire suppression water storage and a process water storage pond, monitoring wells, an administration building, a security/first aid building, a helipad, a laboratory, growth media/cover stockpiles, borrow areas, mine power loop, communications equipment, hazardous waste management facilities, a Class III waivered landfill, and an area to store and treat petroleum contaminated soils; m) turn lane(s) on State Route 278; n) the option for the receipt of off-site concentrates for toll roasting; and o) the closure of the tailings storage facility and the potentially acid generating waste rock disposal facility with the use of evapotranspiration cells to manage the long-term discharge from these facilities, as well as the physical reclamation of Project components.

### **General Concerns**

GBRW concurs with the following statements from the U.S. Environmental Protection Agency (EPA):

The proposed project would consume up to 11,300 acre feet per year of groundwater, resulting in a 10 foot drawdown contour encompassing an area likely in excess of 200 square miles [Using Google Earth Pro and Figure 3.2.19 of the Draft EIS, EPA found that the maximum draw-down area approximates a polygon with an area of over 200 square miles, which is greater than the surface area of Lake Tahoe (http://tahoe.usgs.gov/facts.html)]. The FEIS predicts potential adverse impacts to 22 perennial springs and 7.7 miles of perennial stream segments. Impacts associated with the drawdown of groundwater table levels in Kobeh Valley are anticipated to persist for over 100 years, while those associated with the mine's dewatering operation will persist for well over 400 years. Unless these impacts are mitigated for the duration that they occur, the project may result in the loss of miles of perennial waters essential for wildlife, livestock, and human use.

The FEIS states that drain-down solutions from the tailings storage facilities are expected to contain aluminum, antimony, cadmium, fluoride, manganese, molybdenum, and sulfate concentrations that exceed water quality standards, and will become acidic over time. Waste rock seepage will contain high concentrations of aluminum, arsenic, cadmium,

fluoride, manganese, nickel, zinc, copper, iron, lead, beryllium, thallium, selenium, sulfate, and total dissolved solids. If tailings and waste rock disposal facilities, fluid collection systems, and evapotranspiration cells are not properly managed over the long-term, the project could result in significant and long-term degradation of surface water and/or groundwater quality, as well as wildlife exposure to these waters.

(EPA).4

## I BLM FAILED TO PREVENT "UNNECESSARY OR UNDUE DEGRADATION" OF PUBLIC LAND RESOURCES, AS REQUIRED BY THE FEDERAL LAND POLICY AND MANAGEMENT ACT ("FLPMA"), 43 U.S.C. 1732(B).

FLPMA requires that the BLM "shall ... take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b). This is known as the "UUD" standard. As the leading FLPMA and mining federal court decision states, this duty to "prevent undue degradation" is "the heart of FLPMA [that] amends and supercedes the Mining Law." Mineral Policy Center v. Norton, 292 F.Supp.2d 30, 42 (D.D.C. 2003).

FLPMA, by its plain terms, vests the Secretary of the Interior [and BLM] with the authority – and indeed the obligation – to disapprove of an otherwise permissible mining operation because the operation, though necessary for mining, would unduly harm or degrade the public land.

<u>Id</u>. BLM complies with this mandate "by exercising case-by-case discretion to protect the environment through the process of ... rejecting individual mining plans of operations." <u>Id</u>. BLM cannot approve a mining plan of operations that would cause "unnecessary or undue degradation." 43 C.F.R. § 3809.411(d)(3)(iii). As part of this duty, BLM's mining regulations further require that all operations "must take mitigation measures specified by BLM to protect public lands." 43 CFR § 3809.420(a)(4). Together, these mandates represent a nondiscretionary duty on BLM to protect public lands from the types of pollution and environmental harms caused by the Project.

In order to prevent UUD, BLM must ensure that all operations comply with the Performance Standards in the 3809 regulations found at § 3809.420. See 43 CFR § 3809.5 (definition of UUD, specifying that failing to comply with the Performance Standards set forth at § 3809.420 constitutes UUD). One of the most important of these Performance Standards requires BLM to ensure that all mining operations comply with all environmental protection standards, including state water quality standards. See, e.g., 3809.5 (definition of UUD includes "fail[ure] to comply with one or more of the following: ... Federal and state laws related to environmental protection."); 3809.420(b)(5) (listing Performance Standards that must be met, including the requirement that "All operators shall comply with applicable Federal and state water quality standards ....")(emphasis added).

Further, the IBLA has also repeatedly held that compliance with environmental standards cannot be waived by BLM due to the fact that the costs of compliance would render the mining operation uneconomic and the mining claims invalid.

[I]n determining whether a discovery exists, the costs of compliance with all applicable Federal and State laws (including environmental laws) are properly considered in determining whether or not the mineral deposit is presently marketable at a profit, i.e.

whether the mineral deposit can be deemed to be a valuable mineral deposit within the meaning of the mining laws. If the costs of compliance render the mineral development of a claim uneconomic, the claim, itself, is invalid and any plan of operations therefor is properly rejected. Under no circumstances can compliance be waived merely because failing to do so would make mining of the claim unprofitable.

Great Basin Mine Watch, 146 IBLA 248, 256 (1998)(emphasis added). As EPA stated:

The project as it is currently proposed is likely to significantly and adversely affect surface water and groundwater resources. The proposed monitoring and mitigation measures do not provide sufficient assurance that the potential impacts can or will be mitigated. For example, the Mitigation Plan requires a cessation in spring and stream flow to occur prior to further environmental analysis and implementation of mitigation. This would result in a substantial and harmful time lag between impact and measures essential to fully protect these resources. Furthermore, it is unclear that the water necessary for the proposed surface water mitigation is available for this purpose. Without this water, the proposed mitigation appears infeasible, ineffective, and not viable over the long term.

 $(EPA)^4$ 

### Inadequate geochemical characterization

The geochemcial sampling was not adequate, which casts considerable uncertainty on the mine plan, and preventing degradation of Nevada's waters. Effective sampling is the bedrock of much of the analysis for the project from acid drainage to pit lake water quality development. There needs to be a hard look at the sufficiency of the geochemical characterization to assure that all impacts are reasonably determined and that mitigation measures will be adequate.

Key to prediction of future water quality at mine site is judicious and sufficient sampling of the various rock types and alterations. The bare minimum for characterization as cited in an EPA review<sup>5</sup> is 1 sample per million tons of rock, which EML approximately achieves. According to the FEIS, 1,750 million tons of waste rock is anticipated, so the minimum would be on the order of 1,750 samples, and in total EML appears to have based waste rock characterization on 1,844 samples using 1,545 "historic" pulp samples, 250 historic core samples, and 48 recent core samples (It was not clear to GBRW from the report whether kinetic testing used samples from the 1,844 and/or additional samples).<sup>6</sup> The EPA review article cites other expert sampling opinions; 1 for every 20,000 tons (Gene Farmer, US Forest Service), 1, for every 40,000 tons (British Columbia AMD Task Force. In a more recent review of predicting water quality at mine sites, Maest and Kuipers recommend the following<sup>7</sup>:

Table 1

Mass of Each Separate	Minimum Number of		
Rock Type (tonnes)	Samples		
<10,000	3		
<100,000	8		
<1,000,000	26		
10,000,000	80		

Using this prescription adapted from Price and Errington 1994,<sup>8</sup> yields a similar sampling rate as indicated from Farmer and the BC AMD task force. In view of these reviews and of the potential

for acid drainage and poor water quality that has occurred at other mines in Nevada the sampling rate for the Project is not sufficient. The most glaring example of this is that paucity of potential pit wall samples that were used for the pit lake water quality analysis, "There were little sampling data from some of the pit wall areas because of the relatively cylindrical nature of the orebody," (FEIS, pg. 3-210). This statement clearly indicates how incompletely the sampling was done. EML was relying on samples that were taken 30-40 years earlier, where the mine plan was likely to have been much different that the current plan. These "pulp" samples appear to have been largely from the periphery of the ore body as part of those early explorations when resource evaluation was the primary goal. GBRW recognizes that these samples are useful; however, we are skeptical that they and the additional recent samples have been sufficient to fully understand long-term water quality at the site.

Table 2: Waste Rock Sampling Frequency

Rock type	Primary alteration (over 25% PAG highlighted)	Percentage of Total Waste Based on Mine Model	Waste Rock Tonnage x 10 <sup>6</sup>	Approximate Number of Samples required based on Maest and Kuipersii		Number of Samples used <sup>1</sup>
Undefined	Undefined	0.6	10.5	80	82	unknown <sup>2</sup>
Intermediate	Undefined	0.6	10.5	80	82	unknown <sup>2</sup>
Phase Quartz	Potassic	1.1	19.3	160	110	28
Porphyry	Biotite	0.1	1.75	40	34	7
	Silicic	1.1	19.3	160	110	54
Early Phase	Undefined	6	105	800	254	unknown <sup>2</sup>
Quartz	Argillic	2.3	40.3	325	159	60
Porphyry	Phyllic	0.1	1.75	40	34	109
	Potassic	12.7	222	1770	366	299
	Silicic	1.2	21	160	115	36
Rhyolite	Undefined	10	175	1400	326	unknown <sup>2</sup>
	Argillic	22.9	401	3200	489	466
	Phyllic	0.6	10.5	85	82	107
	Potassic	3.5	61.3	490	195	34
Vinini	Undefined	20.5	359	2870	463	unknown <sup>2</sup>
Formation	Argillic	2.9	50.8	406	178	68
Sediments	Phyllic	1.6	28	224	132	156
	Potassic	12.1	212	1690	358	343
	Silicic	0.1	1.75	40	34	15

<sup>&</sup>lt;sup>1</sup> Estimated from Table 4-1 Waste Rock and Pit Wall Rock Characterization Report, 2008. It was unclear to GBRW how this category translated to categories that appeared in Table 4-1 of the Waste Rock and Pit Wall Rock Characterization Report, 2008.

Number of samples = 25.94 (millions of tons)<sup>0.49</sup>, 
$$r^2$$
 = .9986

<sup>&</sup>lt;sup>ii</sup> The left column is the DEIS estimate determined by linear interpolation extrapolation from Table I, and the right column used a linear fit to a power function based on the table values:

In addition to the overall number of samples is the matter of sufficient samplings of rock types and alterations. In Table 2 above GBRW has compared the sampling for the primary alterations of rock types (based on Table 3.3-3 of the FEIS, pg. 3-209) deduced from Table 4.1 of Waste Rock and Pit Wall Rock Characterization Report, 2008 with recommended sampling for the same tonnage based on Table 1 above. We have provided two methods of estimating the number of samples needed shown in the two columns under the column heading, "Approximate Number of Samples required based on Maest and Kuipersi." The left and right columns use a linear and non-linear respectively interpolation and extrapolations from Table I. It is likely the best reasonable conservative estimate of the sampling rate lies in between these two estimates, with the non-linear approach underestimating, and the linear approach overestimating for large tonnages. Note that some rock types are on the order of hundreds of millions of tons, so extrapolation needs to be cautiously done, since it extends well beyond the basis for the model. In general, based on this analysis the overall sampling should be from  $\sim 3,600 - 14,000$  (non-linear to linear) compared to the 1,844 samples actually used, and sampling under each rock type/primary alteration with a few exceptions is also fewer than recommended. GBRW also notes that as rock strata is subdivided further into various alterations, etc, the number of samples recommended increases.

GBRW did not expect that EML would match the "generic" sampling rate that we have discussed here, and we recognized variation from such recommendations based on field mineralogy with other quick and simple tests, but the deviation is sufficiently wide and typically leans towards fewer than recommended sampling. In our view, the number of samples used for geochemical characterization probably should have been at least 2-4 times what was actually used. GBRW remains concerned that the undersampling is a symptom of cutting costs at the expense of proper assessment of environmental impacts.

According to the waste rock analysis from other static and kinetic testing 29 percent of the waste rock has been classified as potentially acid generating (PAG). According to the FEIS and supporting documents the Mt. Hope deposit and surrounding waste rock is low sulfide and poor in neutralizing capacity. GBRW has noted that many of the rock types/alterations were listed as giving variable result from humidity cell tests (HCT). The discussion of the humidity cell tests (HCT) describes this variability, which typically involves a discrepancy between 2 or 3 test runs. This again underscores the need for additional sampling and analysis to get more of a statistical sense of what to expect from the various rock types/alterations. Overall, it appears that EML has not captured the correct breakdown of PAG versus Non-PAG for this site. We are concerned that as the mine develops more PAG material could be determined, and thus the current analysis would underestimate the impacts.

The low sulfide statement in the FEIS pertains to an average content in the pit volume, and there were tests that indicated not insignificant amount of very high sulfide content. Thus, there will be portions of the waste rock that are likely to be very acid generating, and even low sulfide portions could produce acid drainage in exceedence of Nevada regulations. For example, samples from the Duluth Complex in northeastern Minnesota with low sulfur content, 0.41 to 0.71%, and low buffering capacity were shown to produce pH values from 4.8-5.3. The FEIS is erroneously assuming that since there is low sulfide, on the average, there is little cause for concern over water quality at the Mt. Hope site. Again without sufficient sampling and analysis the low-sulfide assumption is not justified. For example, the Lone Tree mine site in Nevada, where there exists significant carbonate deposits, and thus significantly greater neutralizing capacity yet the pit lake has become very acidic with no end in sight.

### Waste Rock Facility Management Will Not Protect Nevada's water

Although the data is sparse given the available information such as Figures 3.3.4 to 3.3.8 in the FEIS there is a significant potential for acid generation, but with very little neutralizing capacity. For example Figure 3.3.5, Net Acid Generation Versus Net Acid Generation pH, shows that 29% of the samples to be net acid generating and another 16% in the questionable category, so the conservative approach would be to assume that 45% or almost half could be acid forming to various extents. Thus, GBRW foresees significant acid drainage from the PAG waste rock facility (PAGWRF), and a potentially larger footprint for the PAGWRF. A larger footprint could be very problematic, since the existing footprint is dangerously close to two springs, SP-4 and SP-3. Cleary, EML is also anticipating some acid drainage by installing a drainage system at the bottom of the PAGWRF to collect substandard water. What is not in the management plan is a discussion of the possibility of very long-term treatment (possibly in perpetuity) of acidic drainage. This scenario was not addressed in the FEIS or the ROD. This also calls into question whether the estimated reclamation cost and the long-term funding of \$83,202,396 (ROD) will be sufficient.

BLM failed to address an important best practice in the FEIS. There is discussion in the waste rock management plan<sup>10</sup> to encapsulate PAG material with neutralizing material or develop layers of neutralizing rock between PAG rock. The EIS needed to discuss this as a mitigation measure and EML should develop a plan for how this kind of procedure would be achieved. Once the waste rock facility is built the consequences of a poor design are permanent, and adaptive management will be limited as to how to handle unexpected consequences. It is better to implement best practices when there is a luxury of options than after the fact.

#### As EPA stated:

Seepage from the PAGWRDF is expected to contain elevated concentrations of aluminum, arsenic, cadmium, fluoride, manganese, nickel, zinc, copper, iron, lead, beryllium, thallium, selenium, sulfate, and total dissolved solids (Draft EIS, section 3.3.2.2.3). The proposed PAG WRDF and low-grade ore stockpile liners and collection system to promote and control seepage from these facilities should help protect surface water and groundwater quality if they are well designed, properly graded, installed with appropriate quality assurance/quality control, and properly operated and maintained. The collection ponds would store runoff/infiltration from the PAG WRDF and low-grade ore (LGO) stockpile. According to the PoO (p. 80), long-term seepage from the PAG WRDF toe is not anticipated for average or dry conditions due to placement of a soil cover over the WRDF, and the PAG runoff/infiltration evaporation pond will be converted to an ET cell upon closure of the PAG WRDF and LGO stockpile. However, modeled WRDF seepage estimates are not provided in the FEIS to support any conclusions for average to dry conditions or for wetter conditions during the periods either before or after closure of these facilities. Waste rock facilities that have very low average seepage one year may have orders of magnitude greater seepage the following year (for several weeks to several months) in response to wet conditions. It is unclear from the FEIS, therefore, that the proposed soil cover will provide source control essential to proper functioning of the seepage collection system and ET cell, which will be needed to protect water resources from PAG seepage.

 $(EPA)^4$ 

The July 27, 2011 PoO cover letter (p. 10) also states that, because the draindown solutions in the ET cells are anticipated to be of "relatively good quality," the constituents that could

potentially be taken up by vegetation are not likely to provide a risk to wildlife receptors; however, at the time of final permanent closure, a Screening Level Ecological Risk Assessment (SLERA) would be completed to determine the detailed risks based on the fluids present in the tailings storage facilities, and the design would be modified accordingly. None of the documents we have reviewed appear to support the statement that solutions in any of the ET cells will be of relatively good quality. For example, over time, the tailings will become acidic with elevated aluminum, antimony, arsenic, cadmium, fluoride, manganese, molybdenum and sulfate concentrations (Draft EIS, p. 2-53). Seepage from the PAG WRDF is expected to contain elevated concentrations of aluminum, arsenic, cadmium, fluoride, manganese, nickel, zinc, copper, iron, lead, beryllium, thallium, selenium, sulfate, and total dissolved solids; and seepage from the non-PAG WRDF may have high levels of iron, manganese, aluminum, arsenic, fluoride, nickel, zinc, and cadmium (Draft EIS, section 3.3.2.2.3). An ecological risk assessment should be conducted as part of the NEPA process. The potential risks associated with the ET cells should be determined and disclosed in a Supplemental EIS so that appropriate mitigation measures can be developed and disclosed, and the reclamation/closure and post-closure costs can be estimated for inclusion in the financial assurance for the project.

### $(EPA)^4$

Based on the geochemical characterization of the waste rock, seepage from the non-PAG waste rock could also contain elevated concentrations of several constituents, including iron, manganese, aluminum, arsenic, fluoride, nickel, zinc, and cadmium (FEIS, section 3.3.2.2.3). Modeled WRDF seepage estimates are not provided in the FEIS to support any conclusions regarding the seepage movement through the non-PAG WRDF during the periods either before or after closure of this facility. Thus, it is unclear as to the groundwater monitoring and mitigation needs, especially in the long-term.

### Failure To Fully Ascertain And Protect/Mitigate Cultural, Religious, And Historical Resources

The FEIS acknowledges that: "Implementation of the Proposed Action would result in adverse effects to 83 officially eligible [for the National Register of Historic Properties] sites within the area of direct impacts. Outside of this area but within the Project APE, this action would also have indirect impacts on 180 officially eligible and one unevaluated site." FEIS at ES-42-43. "These direct impacts are considered to be significant." Id.

In an attempt to prevent/mitigate these impacts, the FEIS says that a "treatment plan" will be developed in the future: Mitigation Measure 3.21.3.3-1: EML would develop, and submit to the BLM for approval, a treatment plan to address the potential direct impacts to the 83 officially eligible sites within the Project APE. EML would implement the treatment plan prior to any surface disturbance of eligible sites within the area of direct impacts. All adverse effects under the NHPA and direct and indirect impacts under the NEPA to known-eligible properties within the Project APE would be mitigated in accordance with the PA and the treatment plan prepared for the Project. (FEIS pg. ES-43). The FEIS goes on to conclude that: "The implementation of the treatment plan under the mitigation measure would be effective at lessening the impact." Id. See also FEIS at 4-68-4.69, relying on the future "treatment plan" to supposedly mitigate cumulative impacts to these resources.

However, because the "treatment plan" for these resources has not yet been developed, how can BLM claim that it will be "very effective at lessening the impact"? Such speculative reliance on future mitigation measures violates BLM's duties under NEPA to fully consider mitigation measures, and their effectiveness, and the duty under FLPMA to "prevent UUD" to these valuable public land resources. Under NEPA, the agency must have an adequate mitigation plan to minimize or eliminate these impacts – which the FEIS does not have. NEPA requires the agency to: (1) "include appropriate mitigation measures not already included in the proposed action or alternatives," 40 CFR § 1502.14(f); and (2) "include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(f))." 40 CFR § 1502.16(h). NEPA regulations define "mitigation" as a way to avoid, minimize, rectify, or compensate for the impact of a potentially harmful action. 40 C.F.R. §§1508.20(a)-(e). "[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the 'action-forcing' function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989).

NEPA also requires that the agency fully review whether each mitigation measure will be effective. See <u>South Fork Band Council v. Dept. of Interior</u>, 588 F.3d 718, 728 (9th Cir. 2009). "The Forest Service's broad generalizations and vague references to mitigation measures ... do not constitute the detail as to mitigation measures that would be undertaken, and their effectiveness, that the Forest Service is required to provide." <u>Neighbors of Cuddy Mountain v. U.S. Forest Service</u>, 137 F.3d 1372, 1380-81 (9th Cir. 1998).

The FEIS's reliance on a future, as yet-unsubmitted, "treatment plan" to prevent/mitigate adverse impacts to these resources also violates BLM's duties under the National Historic Preservation Act [NHPA]. The NHPA, and its implementing regulations, require full review of these impacts (and mitigation) as part of the public review process – something which has not occurred here.

BLM also failed to conduct the required government-to-government consultation with potentially affected Native American Tribes. Appendix F of the FEIS lists some letters sent to Western Shoshone Tribes and Bands, yet for many Tribes/Bands, only a few (or less) letters were sent in 2007 and 2008, after which the BLM stopped sending any communications. At a minimum, a simple letter or two is not sufficient to satisfy the NHPA and related consultation duties under Presidential Executive Orders. Further, BLM's failure to send any letters at all to many Tribes/Bands after 2007/08 cannot be said to be government-to-government consultation. Also, the few letters contained in Appendix F deal only with the Programmatic Agreement that would be developed and does not constitute the detailed consultation on the Project required by the NHPA and Executive Orders. Further, without proper and full consultation, and involvement from all Western Shoshone communities, the FEIS's analysis of impacts to, and mitigation of, these resources cannot be considered adequate or reliable.

### Project Approval Would Violate FLPMA's UUD Mandate

Taken together, the significant, and in many cases unmitigated, damage to critical environmental, cultural, historical, and religious resources noted herein fails to comply with FLPMA"s mandate that BLM "shall ... take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b). This is known as the "UUD" standard. As the leading FLPMA and mining federal court decision states, this duty to "prevent undue degradation" is "the heart of FLPMA [that] amends and supersedes the Mining Law." Mineral Policy Center v. Norton, 292 F.Supp.2d 30, 42 (D.D.C. 2003). "FLPMA, by its plain terms, vests the Secretary of the Interior [and BLM] with the

authority – and indeed the obligation – to disapprove of an otherwise permissible mining operation because the operation, though necessary for mining, would unduly harm or degrade the public land." Id. "FLPMA's requirement that the Secretary prevent UUD supplements requirements imposed by other federal laws and by state law." Center for Biological Diversity v. Dept. of Interior, 623 F.3d 633, 644 (9th Cir. 2010).

BLM complies with this mandate "by exercising case-by-case discretion to protect the environment through the process of: (1) approving or rejecting individual mining plans of operation." <u>Id.</u> at 645, quoting <u>Mineral Policy Center</u>, 292 F.Supp.2d at 44. The Ninth Circuit has stressed the "environmental protection provided by the MPO [mining plan of operation] process." <u>Center for Biological Diversity</u>, 623 F.3d at 645 (emphasis in original).

BLM cannot approve a mining plan of operations that would cause "unnecessary or undue degradation." 43 C.F.R. § 3809.411(d)(3)(iii). BLM's mining regulations further require that all operations "must take mitigation measures specified by BLM to protect public lands." 43 CFR § 3809.420(a)(4).

In addition, as noted above, the ROD and FEIS fail to not only meet the requirements of NEPA, they fail to protect important cultural, religious and historical sites under FLPMA, including but not limited to the "eligible" sites under the NHPA. Under BLM's mining regulations, "Operators shall not knowingly disturb, alter, injure, or destroy any ... historical or archeological site, structure, building or object on Federal lands." 43 CFR § 3809.420(b)(8)(i). FLPMA, however, also protects those cultural resources that are not "eligible." "Those [sites/properties] that do not meet the eligibility standard are not subject to compliance with Section 106 of the National Historic Preservation Act. This does not mean that they are without protection, only that the NHPA is not the correct legal tool for protecting them." BLM Handbook H-8120-1, "Guidelines for Conducting Tribal Consultation" at II-2.

As noted herein, BLM violated these overarching duties.

# II. THE ROD and FEIS ARE BASED ON INCORRECT AND UNSUPPORTABLE ASSUMPTIONS AND POSITIONS REGARDING EML'S ALLEGED "STATUTORY RIGHT" TO HAVE THE PROJECT APPROVED UNDER THE MINING LAW

The FEIS states that EML has a "statutory right ... [to] develop federal mineral resources" at the site (FEIS pg 1-9). Thus, according to the FEIS, EML has a statutory right to conduct its waste rock and tailings dumping, pit excavation, processing, and other operations based solely on the fact that the company has blanketed the projects lands with mining and/or millsite claims.

Here, although it is difficult ascertain the exact number and nature of the claims from the FEIS, EML has filed lode mining and/or millsite claims on all of the federal lands in the project area, including those where no mining is proposed (i.e., dumping, processing, and other ancillary uses). According to the BLM, the filing of these claims precludes the agencies from choosing the no-action alternative, as well as significantly restricting its approval and review authority over the project.

The BLM's position is wrong. Such rights, or "entitlement" as stated by the BLM, can only accrue to the company if these claims are valid under the 1872 Mining Law. Here, there is no evidence in

the record that these claims are valid. Indeed, the agencies have not even inquired into whether these claims are valid, and apparently has no intention to conduct such an inquiry.

Accordingly, in addition to making an arbitrary and capricious decision without evidentiary support, the BLM violated the Federal Land Policy and Management Act (FLPMA) and the 1872 Mining Law (as amended) by not requiring EML to pay Fair Market Value (FMV) for the use of public lands not covered by valid mining claims, based on the lack of any evidence that the vast majority of the claims at the Project site are valid under the Mining Law. Similarly, BLM's position also violates provisions of FLPMA and the Multiple Use Sustained Yield Act and other laws mandating that BLM manages, or at least considers managing, these lands for non-mineral uses – something which BLM refused to do or consider in this case.

The FEIS's review and the BLM's proposed approval of the Project are based on the overriding assumption that EML has statutory rights to use all of the public lands at the site under the 1872 Mining Law. However, where Project lands have not been verified to contain, or do not contain, such rights, the BLM's more discretionary multiple use authorities apply. See Mineral Policy Center v. Norton, 292 F.Supp.2d 30, 46-51 (D.D.C. 2003).

A proper application of BLM's multiple use, public interest, and sustained yield mandates to those areas not covered by valid claims would result in a very different Project review, alternatives, and level of protection for public land resources and values, as well as reducing or eliminating the adverse impacts to the use of these lands by members of the public and commenters.

The <u>Mineral Policy Center</u> court specifically recognized the federal government's duty to apply its broader, multiple use authority when mineral development operations are proposed on lands not subject to valid and perfected claims:

While a claimant can explore for valuable mineral deposits before perfecting a valid mining claim, without such a claim, she has no property rights against the United States (although she may establish rights against other potential claimants), and her use of the land may be circumscribed beyond the UUD standard because it is not explicitly protected by the Mining Law.

292 F.Supp.2d at 47. The court was equally clear as to what was required to "perfect" a mining claim:

The Mining Law gives individuals the right to explore for mineral resources on lands that are "free and open" in advance of having made a "discovery" or perfected a valid mining claim. United States v. Locke, 471 U.S. 84, 86, 105 S.Ct. 1785, 85 L.Ed.2d 64 (1985). The Mining Law provides, however, that a mining claim cannot be perfected "until the discovery of the vein or lode." 30 U.S.C. § 23.

<u>Id</u>. at 46 n.19.

Regarding the apparent millsite claims at the site, the FEIS is based on the view that EML can locate and use as many millsite claims as it needs for Project operations. FEIS at 1-9. That is wrong, as a proper understanding of the millsite provision in the Mining Law, 30 U.S.C. §42, shows that EML can only locate one 5-acre millsite claim (or multiple millsite claims with a maximum of 5 acres total) for each valid lode claim to be used by the Project.

For both lode and millsite claims for which BLM has not determined are valid, pursuant to the Mineral Policy Center decision:

[b]efore an operator perfects her claim, because there are no rights under the Mining Law that must be respected, BLM has wide discretion in deciding whether to approve or disapprove of a miner's proposed plan of operations.

<u>Id</u>. at 48. In its review of the Project, BLM erroneously believed that it did not have – and never even considered – this "wide discretion" to "approve or disapprove" any part of EML's Plan of Operations.

Regarding the requirement for the federal government to obtain Fair Market Value for the use of lands not covered by valid claims, the court held that, under FLPMA, "the United States [must] receive fair market value of the use of the public lands and their resources unless otherwise provided for by statute." 43 U.S.C. §1701(a)(9). The court held that unless the lands were covered by valid claims (i.e. the situation "otherwise provided for by statute" in § 1701(a)(9)), the agencies must comply with their Fair Market Value duty: Operations neither conducted pursuant to valid mining claims nor otherwise explicitly protected by FLPMA or the Mining Law (i.e., exploration activities, ingress and egress, and limited utilization of mill sites) must be evaluated in light of Congress's expressed policy goal for the United States to "receive fair market value of the use of the public lands and their resources." 43 U.S.C. § 1701(a)(9). Mineral Policy Center. at 51.

At Mt. Hope, the BLM has utterly failed to even consider the application of its multiple use authority, and related Fair Market Value requirements pursuant to the Court's Order in Mineral Policy Center – a violation of FLPMA, the Mining Law, and their multiple use mandates, as well as being an arbitrary and capricious decision under the Administrative Procedure Act (APA).

As noted above, the vast majority of the proposed disturbance on public land involves waste rock, tailings, processing and other non-extractive uses covered by unpatented lode and/or millsite claims. There is no evidence in the record that any of these claims are valid or indeed contain locateable minerals (outside of arguably the lode claims covering the edges of the mine pit, although the validity of these claims have also never been ascertained). Indeed, it is likely that the lands covering the waste rock, tailings, and other ancillary facilities do not contain the requisite locateable minerals, which is a prerequisite for claim validity. See 30 U.S.C. § 22 (only "valuable mineral deposits" are covered by the Mining Law); 30 U.S.C. § 611 ("common varieties" of minerals are not locatable under the Mining Law). It also appears from FEIS Section 3.4 that all or most of the lands outside the mine pit contains common varieties of minerals, or at a minimum, no "valuable minerals" under the Mining Law.

### As the Interior Department has held:

Generally, absent the discovery of a "valuable mineral deposit" on each of the unpatented lode mining claims, ASARCO would not be entitled to the "exclusive right of possession and enjoyment of all the surface [of the claim]" and subsurface rights under 30 U.S.C. §§ 22 and 26, good against the United States, or ultimately to a patent of the claimed lands, pursuant to 30 U.S.C. §§ 22 and 29 (2000). Best v. Humboldt Placer Mining Co., 371 U.S. 334, 335-36 (1963); Wilbur v. Krushnic, 280 U.S. 306, 316-17 (1930); Cameron v. United States, 252 U.S. 450, 460 (1920); Cole v. Ralph, 252 U.S. 286, 294-96 (1920). In such circumstances, BLM would have discretion to modify or even reject an MPO filed to engage in mining operations and related activity. Great Basin Mine Watch, 146 IBLA 248, 256

(1998) ("Rights to mine under the general mining laws are derivative of a discovery of a valuable mineral deposit").

Center for Biological Diversity, 162 IBLA 268, 278 (2004). "[T]he location of a mining claim does not render a claim presumptively valid and the Department may require a claimant to provide evidence of validity before approving an MPO or allowing other surface disturbance in connection with the claim." Id. at 281.

In addition, BLM's decision not to require the payment of Fair Market Value, and to limit its authority over the use of the ancillary lands, must be supported by substantial evidence in the record - evidence which does not exist. The agency cannot simply assume, without any evidence (and indeed the evidence points to the contrary) that the lands to be buried by the dumps and processing facilities are covered by valid mining claims. The Supreme Court has explained: [A]n agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto Ins. Co., 463 U.S. 29, 43 (1983). The Ninth Circuit, citing Motor Vehicle Mfrs, has explained: [T]he APA requires us to determine whether the Commission's decision was a reasonable exercise of its discretion, based on consideration of relevant factors, and supported by the record. . . . While our standard of judicial review is highly deferential, it may not be uncritical. Under the APA, an agency's discretion is not boundless, and we must satisfy ourselves that the agency examined the relevant data and articulated a satisfactory explanation for its action based upon the record." People of State of Cal. v. F.C.C., 905 F.2d 1217, 1230 (9th Cir. 1990). See also Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 378 (1989)(requiring that courts ensure that agency decisions are founded on a reasoned evaluation "of the relevant factors.").

Put another way, it defies the record in this case, and indeed common sense, for the agencies to assume that EML would permanently bury "valuable mineral deposits" with hundreds of millions of tons of waste rock and contaminated tailings. Indeed, it is very likely that these ancillary lands do not contain sufficient mineralization to qualify as "valuable mineral deposits" and are in fact simple "common varieties" of rock and sand covering the non-mineralized portions of the Project site.

At a minimum, the agencies should have inquired as to whether the vast majority of the Project lands contained "common varieties" or "valuable mineral deposits." BLM regulations contemplate an investigation into whether the lands covered by proposed plans of operation contain the requisite locateable minerals instead of common varieties. Under 43 CFR § 3809.101(a), except for casual use operations, claimants "must not initiate operations for minerals that may be 'common variety' minerals ... until BLM has prepared a mineral examination report."

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<sup>&</sup>lt;sup>1</sup> The Board's decision in Center for Biological Diversity was overturned by the Ninth Circuit Court of Appeals in Center for Biological Diversity v. U.S. Department of the Interior, 623 F.3d 633 (9th Cir. 2010). That case involved BLM's approval of a land exchange with the holder of mining claims. The BLM had approved the land exchange based on its view that, because the exchange proponent had mining claims, the exchange would have made no difference in BLM's regulation of the intended mining of the lands (since it was obligated to approve the mine anyway). The IBLA affirmed the BLM's position. The Ninth Circuit rejected that view, and held that the mere fact that the exchange proponent had mining claims did not mean that BLM lacked authority to reject or condition eventual mining on the land if it remained in public ownership. <u>Id</u>. at 642-647.

In this case, due to the evidence showing that the lands proposed for the waste dumping, tailings, and other non-extractive uses do not contain the requisite valuable minerals (e.g., the mineralized zone is limited to the mine pit, even then the pit has not been verified to be covered by valid claims), and may indeed be "common variety" minerals, BLM's assumptions of "rights" or an "entitlement" under the Mining Law are erroneous. For those lands covered by millsites, although the "valuable mineral deposit" requirement does not apply, the strict limits on the number of millsites contained in the Mining Law have been violated and the vast majority of those claims are thus invalid. At a minimum, the agency's assumptions of these rights/entitlements should have been investigated and supported by detailed factual evidence – evidence lacking in this case.

## III. BLM VIOLATED THE NATIONAL ENVIRONMENTAL POLICY ACT ("NEPA"), 42 U.S.C. 4321 ET SEQ, AND FLPMA

In addition to the NEPA violations noted above, the following additional errors warrant the vacation of the FEIS and the preparation of a revised DEIS/FEIS subject to full public and agency reviews.

### Monitoring plan

The Mount Hope Project Monitoring Plan (DEIS, App. B; FEIS App. C) primarily addresses water quantity monitoring and provides almost no information on water quality monitoring. For example, the Monitoring Plan identifies only four wells and two locations in Roberts Creek that will be monitored for water quality, but it does not specify the parameters to be monitored, the frequency of monitoring, or the mine phases during which monitoring will be conducted. We were unable to find any additional discussion of water quality monitoring or identification of water quality monitoring sites in the FEIS. Tables 6-12 and 6-13 in the P00 identify several wells and facility fluid collection areas that would be monitored, but for only the mine closure period, and for only up to 30 years. These tables do not include monitoring of the pit lake or WRDF seepage and draindown solutions.

### Air Quality

The FEIS estimates substantial loss of phreatophytic vegetation as a consequence of drawdown of groundwater table levels. This change in vegetative coverage may increase the amount of windblown dust particulate emissions in the region. The FEIS failed to evaluate the significance of these emissions, which are likely to have significant adverse impacts on local and regional air quality. However, because no evaluation of this impact has been provided, no conclusions can be made regarding the severity of these emissions in relation to the National Ambient Air Quality Standards (NAAQS) for particulate matter 10 microns or less microns or less (PM<sub>10</sub>) or for particulate matter 2.5 micron or less (PM<sub>25</sub>) including those newly-adopted by EPA that will be in place during the life of the Project (adopted by EPA on Dec. 14, 2012).

### **Cumulative Impacts**

As noted herein, the FEIS failed to fully consider all "direct and indirect impacts" under NEPA. These failures are in addition to the FEIS' failure to review the "cumulative impacts" from all "past, present, and reasonably foreseeable future actions" under NEPA. 40 CFR § 1508.7. In this case, the FEIS' analysis of cumulative impacts consists largely of a listing of the number of acres affected by the past, present, and reasonably foreseeable future surface disturbances for the cumulative impact

areas (FEIS Chapter 4). Although the FEIS contains a short paragraph or two discussing cumulative impacts to some resources, the document provides no additional information on the actual cumulative impacts.

The Ninth Circuit recently and squarely rejected such reliance on the listing of the acreages of other projects as the primary means to review cumulative impacts:

A calculation of the total number of acres to be [impacted by the other projects] in the watershed is a necessary component of a cumulative effects analysis, but it is not a sufficient description of the actual environmental effects that can be expected from [impacting] those areas.

### Klamath Siskiyou Wildlands Center v. BLM, 387 F.3d 989, 995 (9th Cir. 2004).

[T]he general rule under NEPA is that, in assessing cumulative effects, the Environmental Impact Statement must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment. See Neighbors of Cuddy Mountain v. United States Forest Serv., 137 F.3d 1372, 1379-80 (9th Cir.1998); City of Carmel-By-The-Sea v. United States Dept. of Transp., 123 F.3d 1142, 1160-61 (9th Cir.1997).

### Lands Council v. Powell, 395 F.3d 1019, 1028 (9th Cir. 2005):

The [agency] cannot simply offer conclusions. Rather, it must identify and discuss the impacts that will be caused by each successive [project], including how the combination of those various impacts is expected to affect the environment, so as to provide a reasonably thorough assessment of the project's cumulative impacts.

<u>Klamath Siskiyou</u>, 387 F.3d at 1001. In a major mining and NEPA decision, the Ninth Circuit recently specifically rejected the type of brief mention or listing of projects/acreages as found in the DEIS:

In a cumulative impact analysis, an agency must take a "hard look" at all actions. An EA's analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment. ... Without such information, neither the courts nor the public ... can be assured that the [agency] provided the hard look that it is required to provide.

<u>Te-Moak Tribe of Western Shoshone</u>, 608 F.3d 592, 603 (9th Cir. 2010) (Rejecting EA for mineral exploration that had failed to include detailed analysis of impacts from nearby proposed mining operations. Although that case involved an EA, the need for a complete cumulative impacts analysis also fully applies to an EIS).

In <u>Great Basin Mine Watch v. Hankins</u>, 456 F.3d 955, 971-974 (9th Cir. 2006), the court struck down the same sort of acreage listing and brief, generalized descriptions of mining impacts in the region. The court required BLM to include "mine-specific ... cumulative data." <u>Id</u>. at 973. Relying on Klamath-Siskiyou, and Lands Council, the court highlighted the need for a "quantified

assessment of their [other projects] combined environmental impacts" and "objective quantification of the impacts." <u>Id</u>. at 972. That has not been done here.

For example, although the FEIS lists the nearby mining and other projects on cultural, Native American, water, wildlife, air, and other resources, there is no "mine-specific ... cumulative data" for any other these past, present, or reasonably foreseeable future actions. Nor is there a "quantified assessment of their [other projects] combined environmental impacts" and "objective quantification of the impacts." Another example involves potential oil and gas operations. Although Chapter 4 shows extensive oil and gas leasing and operations, there is no "quantitative assessment" of the impacts from these activities.

Overall, this FEIS's cumulative impacts discussion is very similar to the Final EIS deemed inadequate under NEPA in <u>Great Basin Mine Watch v. Hankins</u>. As such, BLM must prepare a supplemental EIS to correct these deficiencies, and the other errors noted in these comments.

The FEIS also does not adequately address public water rights, such as Public Water Reserve (PWR) #107, as well as the public land springs, seeps, and streams that don't rely on wells. Thus, there is little, if any, mitigation either analyzed or proposed, for the post-closure impacts that will occur. Relatedly, there is no analysis of the effectiveness of this post-closure mitigation.

Regarding PWR 107, the FEIS admits that many could be affected, but have yet to be quantified or analyzed. "Additional ... and future PWRs that are reserved for stockwatering (and domestic) purposes could exist within the Project Area and within the ten-foot ground water drawdown contour," (DEIS pg. 3-57). BLM thus failed its duty to analyze these public rights under NEPA, and failed to protect them under its PWR 107 duties. Further, the DEIS limits any potential PWRs to 1,800 gpd (DEIS pg. 3-77), yet fails to explain why such springs/waterholes with less flow can be ignored. Further, BLM has not shown that the appropriate lands surrounding the PWR 107 waters have been withdrawn from entry and excluded from operations.

The failure to fully analyze all of the PWRs violates NEPA, whereas the failure to fully protect all PWRs (and withdrawn lands associated with the PWRs) violates BLM's duties under the PWR itself as well as BLM's FLPMA/UUD duties.

### Long-Term Funding Mechanism/Reclamation Bond

Following closure of the proposed Mount Hope Mine, long-term post-closure monitoring and mitigation will be necessary at the mine and within the approximately 200-square-mile area affected by the project. BLM will require the operator Eureka Moly, LLC (EML) to establish a long-term funding mechanism to cover the costs of these obligations; however, the FEIS lacks critical information regarding many of these activities, as well as the estimated costs of these post-closure obligations, and the nature and adequacy of the funding mechanism.

Throughout the EIS process transparency was lacking in regards to the nature of the Long-Term Funding Mechanism (LTFM). The ROD (pg. 31) did finally reveal the amount of the seed money and the eventual values needed for long-term management. The need for the LTFM is a recognition that the Mt. Hope site is likely to be more complex than currently supposed, and that additional mitigation and long-term management may be needed. The FEIS states, "There is a potential for additional monitoring and maintenance tasks to be required beyond the 30-year post-closure timeline that is currently not included in the reclamation cost estimate. Financial assurance for these tasks would be provided outside of the reclamation financial guarantee by means of a LTFM." (pg.

2-77). The public has not had access to the details of the trust fund mentioned in the ROD nor the evaluation of the total cost of the mitigation and monitoring over the 500 year period, which is anticipated to be \$83,202,396. Furthermore the "The Mt. Hope Project Long-Term Irrevocable Trust and the Mt. Hope Project Long-Term Trust Agreement" mentioned in the ROD was not signed until after the FEIS was released. This agreement should have be part of the public documents supporting both the DEIS and the FEIS.

### **CONCLUSION**

The FEIS admited that the Project will have significant, long-lasting, and in some cases permanent adverse impacts to water resources, including the loss or elimination of perennial and/or seasonal streams and numerous springs and seeps due to the Project's dewatering. See FEIS Chapter 3. BLM thus violated its duty under FLPMA to prevent "undue degradation" to these waters. The FEIS, however, states that its "mitigation measures" will be "very effective" in eliminating any adverse impacts. For the dewatering impacts during the Project, much of the "mitigation" is merely a plan to develop future mitigation (FEIS pp. 3-88 - 3-111). That violates BLM's duties under NEPA. See South Fork Band Council v. Dept. of Interior, 588 F.3d 718, 728 (9th Cir. 2009)(BLM EIS contained an "inadequate study of the serious effects of ... exhausting water resources."). Further, BLM has even less mitigation for post-closure impacts from dewatering, since the primary mitigation measures for impacts during the Project's 40+ years will not be available. "For any significant impacts to wells with associated active ground water use with water rights that do not occur until after the end of mining and milling operations, the operational measures described above may not be available," (FEIS pg. 3-111). Here, BLM posits that mitigation could include speculative actions such as drilling deeper wells, or posting a bond (FEIS pg. 3-112).

Overall, the shortcomings of the FEIS require a supplemental EIS process to take the required "hard look" at the impacts of the Project. This is in addition to the violations FLPMA and other laws noted above in the FEIS and ROD. Thus, the ROD and FEIS must be rescinded. Thank you for taking time to review the ROD and FEIS for the Mount Hope Project.

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Sincerely,

/s/ John Hadder

John Hadder, Director, Great Basin Resource watch

/s/ Larson Bill

Larson Bill, Western Shoshone Defense Project

cc: Eureka County Commission
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U.S. EPA, Region IX,

<sup>1</sup> Bureau of Land Management. 2012. *Mount Hope Project Record of decision, Plan of Operations Approval, and Approval of Issuance of Right-of-Way*, Publication Index Number: NV063-EIS07-019. November 2012. United States Department of the Interior. Bureau of Land Management - Mount Lewis Field Office, Battle

Mountain, NV.

<sup>2</sup> Bureau of Land Management, *Mount Hope Project Final Environmental Impact Statement*, Publication Index Number: NV063-EIS07-019, October, 2012, United States Department of the Interior. Bureau of Land Management - Mount Lewis Field Office, Battle Mountain, NV.

<sup>3</sup> Extracted from the ROD and FEIS.

- <sup>4</sup> U.S. Environmental Protection Agency, Mount Hope Project Draft Environmental Impact Statement (EIS), Eureka County, Nevada [CEQ #20110404], Region IX, 75 Hawthorne Street, San Francisco, CA, March 28, 2012.
- <sup>5</sup> U.S. Environmental Protection Agency, "Technical Document Acid Mine Drainage Prediction," EPA530-R-94-036, December 1994, pg 11.
- <sup>6</sup> General Moly Inc., "Mount Hope Project Waste Rock and Pit Wall Rock Characterization Report," January 28, 2008, pp. 4-2 4-3.
- <sup>7</sup> Maest, A.S., Kuipers, J.R., Travers, C.L., and Atkins, D.A., 2005. Predicting Water Quality at Hardrock Mines: Methods and Models, Uncertainties, and State-of-the-Art, pg. 22.
- <sup>8</sup> Price, W. and Errington, J, 1994. ARD Policy for Mine Sites in British Columbia. Presented at International Land Reclamation and Mine Drainage Conference and the Third International Conference on the Abatement of Acid Drainage, Pittsburgh, PA, p. 287.
- <sup>9</sup> General Moly Inc., "Mount Hope Project Waste Rock and Pit Wall Rock Characterization Report," January 28, 2008, pg. 8-2, Table 8.1.
- <sup>10</sup> Eureka Moly LLC., "Revised Mount Hope Project Waste Rock Management Plan Report," October, 2009.