



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

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Notice of Final Decision - Bureau of Mining Regulation and Reclamation

Web Posting: 11/19/2012

Deadline for Appeal: 11/29/2012

**Mount Hope Mine
Eureka Moly, LLC
Reclamation Permit No. 0330**

The Nevada Division of Environmental Protection (Division) has decided to issue Reclamation Permit No. 0330 (Permit) for a mining project to Eureka Moly, LLC (Permittee). This Permit authorizes the Permittee to reclaim the Mount Hope Mine project located in Eureka County, Nevada. The Division has been provided with an application, in accordance with Nevada Revised Statute (NRS) and Nevada Administrative Code (NAC) 519A to assure the Division that the Permittee will leave the project site safe, stable, and capable of providing for a productive post-mining land use.

This Permit will become final on December 4, 2012. The final determination of the Administrator may be appealed to the State Environmental Commission (Commission) pursuant to NAC 519A.415. The appeal must be filed by November 29, 2012 and in accordance with administrative rules of the Commission.

The Permit authorizes 261 acres of surface disturbance on private land and 7992 acres of surface disturbance on public lands administered by the Bureau of Land Management (BLM), as described in the permit application dated July 2012, entitled *Mount Hope Project Plan of Operations and Reclamation Permit Application*.

Comments were received from Eureka County and Great Basin Resource Watch during the public comment period. The comments received and the Division responses are presented below:

Comments from Eureka County (Jake Tibbitts-Natural Resources Manager).

- *Comment 1. There is a discrepancy with the permitted acreage disturbance in the draft Reclamation Permit and what is outlined in the BLM Final Environmental Impact Statement (FEIS). The FEIS states 8,355 acres while the Permit outlines 8,253 acres—a difference of 102 acres.*

Division Response: The 102-acre discrepancy between the disturbance acreages shown in the Permit and the FEIS is associated with acreage disturbance for the 230-kV power line corridor.

The Permit includes 22 acres of disturbance on public land for this facility within the project boundary. The FEIS includes 124 acres of surface disturbance for this facility. An accompanying footnote in the FEIS explains that of the 124 total acres shown; 22 acres will be managed under the Plan of Operation and 102 acres will be managed under Right-of-Way and Plan of Development agreements with the BLM. The Division only included the 22 acres to be administered under the Plan of Operation in the Permit.

- *Comment 2. The presentation by the Division outlined that reclamation is intended to ensure that “land disturbed by mining activities” is reclaimed and stabilized to a beneficial post-mining land use. The County has been consistent in its approach to wanting all impacts and disturbance of the Mt. Hope Project properly addressed. So far, neither BLM nor NDEP have been willing to ensure that all disturbance ties to the Project—direct or indirect—are addressed and properly reclaimed. There has been wrangling about the difference between direct and indirect disturbance and so far, only direct disturbance is considered as a target for reclamation even though indirect disturbance will occur resulting in matching the definition of NDEP of “land disturbed by mining activities.” There are impacts considered indirect that fall in a type of “no-mans-land” where there is no oversight or accountability. This would include land disturbance tied to groundwater lowering in the well-field and the subsequent dry out of phreatophyte vegetation, increased soil exposure, and increased wind erosion. A second example is the required mitigation of water resources that BLM has outlined in the EIS which would include direct and possible indirect disturbance. Many of these mitigation measures would require drill pads, access roads, pipelines, and other disturbing equipment usage. BLM analyzed and quantified the additional direct land disturbance of these activities in the EIS. NDEP must, at a minimum, incorporate these disclosed and directly disturbed acreages in the reclamation permit.*

Division Response: The Division’s authority to issue and administer reclamation permits are provided and defined under NAC 519A.010 through 519A.415 regulations. NAC 519A.025 defines “affected” land. *“Affected” means that the surface of the land is or will be disturbed by an exploration project or mining operation, or that the land is used:*

- 1. As an evaporation or settling pond, leach dump, placer area or tailings pond or dump; or*
- 2. In conjunction with any structure, facility, equipment, machine, tool, material or property incident to an exploration or mining operation.*

NAC 519A regulations do not require reclamation permits to consider or include, or provide reclamation of potential indirect consequences outside of the permitted project boundary that may (or may not) result from the permitted mining and reclamation activities.

In the event the Permittee is required to create additional surface disturbance inside or outside of the permitted project boundary in conjunction with any mitigation measures that may be required pursuant with BLM’s Record of Decision (ROD), the Division will:

1. Coordinate with the BLM to determine if a Plan of Operation/Reclamation Plan amendment, and reclamation permit modification will be required; and
 2. The Permit will include a Schedule of Compliance (SOC) condition that will require any site-specific mitigation plans required by the BLM be submitted concurrently to the Division. The Division will evaluate the submittal and determine if implementation of proposed mitigation activities will create additional surface disturbance or reclamation liability, within or outside of the existing permitted project boundary, that would require the Plan for Reclamation be amended and the permit modified pursuant with the regulations at NAC 519A.290, 295, 300 and 305, or current regulations at that time.
- *Comment 3. Does the final Permit come before BLM's ROD? If so, how or why when BLM will outline mitigation in the ROD that will be required and result in direct ground disturbance (as discussed in the comment above)? The Permit must come after the ROD and after incorporation of direct disturbance needed to implement required mitigation.*

Division Response: See the response to the previous comment. Mitigation requirements that may be included in the ROD will not identify specific locations, amount of additional surface disturbance, or required reclamation of additional disturbance, at the time the ROD is issued. The Division anticipates future additional surface disturbance, if any, associated with mitigation requirements would be administered through permit modifications as described above.

Comments from Great Basin Resource Watch (John Hadder, Director).

- *Comment 1. Open Pit Reclamation. Great Basin Resource Watch would like the Division to consider a reclamation plan for the open pit that includes a beneficial use of the pit lake. Especially if the quality of the pit lake is as predicted in the pit lake studies then at least recreational use is possible. In addition there will need to be a plan to reclaim at least a portion of the open pit wall for safe public access. The pit lake will ultimately hold a significant amount of water that will be wasted if there is no beneficial use attached to this water.*

The Division does have the authority to require reclamation of the open pit/pit lake. GBRW requests an analysis or at least a discussion of why the Division is not considering reclamation of the open pit/pit lake for a minimum of recreational use.

Division Response: NAC 519A.250 allows for exemption of open pits and rock faces from reclamation requirements. The designation of beneficial uses of a pit lake is beyond the scope and intent of the NAC 519A regulations. The reclamation plan did not address or analyze activities that would be associated with the open pit lake for recreational use. The post-

mining land use of wildlife use and future mineral exploration and development can be met by not backfilling or reclaiming the pit still meets.

Per NAC 519A.255, Reclamation not required beyond that approved by federal agency,: *if an operator can establish to the satisfaction of the Division that reclamation was approved by the Bureau of Land Management, the United States Forest Service or another federal land management agency, further reclamation is not required on affected land.*

The FEIS considered a complete backfill alternative during the project alternative scoping process. The FEIS includes a Partial Backfilling Alternative that generally proposed partially backfilling the open pit with non-potentially acid generating (non-PAG) waste rock. The partial backfilling would be completed to an elevation necessary to eliminate the potential for pit lake formation. The FEIS (p. ES-6) eliminated the complete backfill alternative for the following reasons:

Backfilling the open pit would result in covering additional mineral resources that would not be currently considered ore, such as the lower grade molybdenum mineralization in the open pit wall and the other mineralization that is known to occur in the surrounding host rock adjacent to the open pit walls.

Under the complete backfill alternative, the groundwater quality within the pit backfill would be anticipated to be impacted by the waste materials (non-PAG) deposited in the open pit and from infiltrating the runoff from pit walls. The poor-quality water could flow from the confines of the former pit shell into the surrounding groundwater, degrading water of the State.

The partial backfilling alternative at the completion of mining (approximately year 32) with non-PAG waste rock was considered and eliminated for the following reasons:

Backfilling the open pit would result in covering additional mineral resources that would not be currently considered ore, such as the lower grade molybdenum mineralization in the open pit wall and the other mineralization that is known to occur in the surrounding host rock adjacent to the open pit walls.

The backfilling would extend the reclamation schedule by an approximate additional twelve years, and would create a substantial economic impact to the Permittee.

- **Comment 2. Waste Rock Reclamation.**
Due to the length, and technical nature of comments regarding waste rock reclamation, the Division paraphrases the GBRW comments below:

A. GBRW is concerned that the sampling for geochemical characterization of waste rock was inadequate. As a result the potentially acid generating (PAG) waste rock dump may be significantly larger than currently envisioned, which if so will affect the reclamation plan.

Division Response: Under the Water Pollution Control Permit (WPCP), throughout active mining operations the Division will require waste rock characterization be performed. The on-going characterization will determine if the waste rock meets the definition of PAG or non-PAG material and will be managed accordingly. If the mining activity results in a greater volume of PAG material than initially predicted, the Permittee would be required to modify both the WPCP and the Permit to ensure waste rock management and reclamation requirements would be performed in compliance with the NAC 445A and NAC 519A regulations, respectively.

B. The Mt. Hope area receives significant precipitation for Nevada. The PAG waste rock dump is likely to capture much more water than predicted. In terms of reclamation the two-foot cover is probably not sufficient to prevent infiltration and acid drainage. GBRW strongly recommends a thicker cover to decrease infiltration further.

Division Response: The Permittee will be required to construct on-site test cells with site-specific materials to evaluate the performance of proposed cover materials and thicknesses. The WPCP will include a SOC condition that the Permittee provide a workplan to construct the test cells as soon as mining has advanced to a point where waste rock of sufficient type and volume to construct the test cells is available (estimated to be approximately two-years after mining commences).

The Division, in coordination with the BLM, will evaluate the data collected from the test cells and will adjust the closure cover assumptions as necessary to minimize the potential formation and drainage of impaired water from the PAG waste rock facility. The Reclamation Plan and reclamation cost estimate would be amended as needed to reflect the changes in the reclamation and final closure requirements that may be concluded from the site-specific test cell findings.

C. GBRW notes there have been documented flash-flood events in the vicinity of the PAG waste rock dump. It is not clear that this kind of water event is accounted for in the waste rock management and reclamation plan.

Division Response: The PAG waste rock facility will be constructed with an upgradient surface drainage diversion ditch to route upgradient flows away from the facility. The facility will be constructed on a low-permeability, compacted earthen subsurface, with an underdrain piping system to collect and convey any meteoric infiltration related drainage to a lined stormwater collection channel during operations. Any flows collected during operations would be directed to a lined storm pond and introduced into the process circuit as make-up water. The diversion ditch and collection channel will remain after site closure. Any drainage collected from the PAG waste rock facility during post-closure will report to an evaporation cell that will be

constructed in the vicinity of the storm pond near the processing area. The diversion and collection channels will be designed to contain flows from a 100-year, 24-hour precipitation event.

D. GBRW is concerned with the proposal to cover spring (SP-7) under the footprint of the NAG (non-PAG) waste rock dump. GBRW comments that after mining is stopped the conduit could collapse and then the spring is lost, or worse the spring becomes a source of acid drainage. There should be a plan in the event of conduit collapse.

Division Response: General construction of the SP-7 conveyance trench consists of the following: Prior to burial, spring SP-7 would be fitted with an engineered underdrain system including a trenched french-drain system below the existing grade. The french-drain would include a collection sump with drain pipe surrounded by coarse rock and wrapped in a geofabric to deter finer soil particles from entering the drain rock. The trenched underdrain conveyance would be covered with an impervious liner at the surface prior to placing waste rock above it. The underdrain conveyance would daylight at the toe of the dump to a natural drainage on the adjacent undisturbed landscape. The design of the conveyance trench is intended to provide a preferential flow path for SP-7 spring water and isolation from the non-PAG waste rock dump material over the long-term.

The WPCP will require the Permittee to monitor flow at the SP-7 discharge point and to sample and analyze the flow for Profile I constituents during active mine operations and for at least five years after mining is completed. The reclamation cost estimate includes costs for 30-years post closure monitoring and sampling of the SP-7 discharge point for Profile I constituents.

In the event any seepage from the non-PAG facility is observed, it would be analyzed for Profile I constituents. If the seepage is determined to have the potential to degrade waters of the State, it will be required to be managed in accordance with applicable regulations.