

STATE OF NEVADA
Department of Conservation and Natural Resources
Division of Environmental Protection
Bureau of Mining Regulation and Reclamation
Water Pollution Control Permit

Permittee: **Eureka Moly, LLC
Mount Hope Project
2215 North 5th Street
Elko, Nevada 89801-2458**

Permit Number: **NEV2008106 (New 2012)**

Pursuant to Nevada Revised Statutes (NRS) 445A.300 through 445A.730, inclusive, and regulations promulgated thereunder by the State Environmental Commission and implemented by the Division of Environmental Protection (the Division), this Permit authorizes the Permittee to construct, operate, and close the **Mount Hope Project**, in accordance with the limitations, requirements and other conditions set forth in this Permit. The Permittee is authorized to process up to **29 million tons** of ore per year.

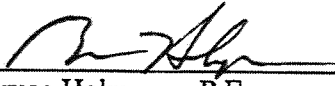
The facility is located in Eureka County, within Sections 1 and 12, Township (T) 21 North (N), Range (R) 51 East (E); Sections 4, 5, 6, 7, 8, and 9, T21N, R52E; Sections 4, 5, and 6, T21½N, R52E; Section 1, T21½N, R51½E; Sections 1, 2, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, and 36, T22N, R51E; Sections 1, 12, 13, 24, 25, and 36, T22N, R51½E; Sections 6, 7, 8, 17, 18, 19, 20, 29, 30, 31, and 32, T22N, R52E; Sections 25, 35, and 36, T23N, R51E; and Section 31, T23N, R52E, Mount Diablo Baseline and Meridian, approximately 24 miles northwest of the town of Eureka, Nevada.

The Permittee must comply with all terms and conditions of this Permit and all applicable statutes and regulations.

This Permit is based on the assumption that the information submitted in the applications of 11 July 2008, 09 November 2009, and 20 August 2012, as modified by subsequent approved amendments, is accurate and that the facility has been constructed and is being operated as specified in the application. The Permittee must inform the Division of any deviation from or changes in the information in the application, which may affect the Permittee's ability to comply with applicable regulations or Permit conditions.

This Permit is effective as of **December 13, 2012**, and shall remain in effect until **December 12, 2017**, unless modified, suspended, or revoked.

Signed this 21st day of **November, 2012**.



Bruce Holmgren, P.E.
Chief, Bureau of Mining Regulation and Reclamation

I. Specific Facility Conditions and Limitations

A. In accordance with operating plans and facility design reviewed and approved by the Division the Permittee shall:

1. Construct, operate, and close the facility in accordance with those design plans;
2. Contain within the fluid management system all process fluids including all meteoric waters which enter the system as a result of the 25-year, 24-hour storm event; and
3. Not release or discharge any process or non-process contaminants from the fluid management system.

B. Schedule of Compliance:

1. With each future application for Permit renewal, and with any application for a Permit modification that could affect the pit lake predictive model, the Permittee shall submit an updated pit lake model and Ecological Risk Assessment, if appropriate, that incorporates all data collected since the previous submittal and any new methods or alternatives, as applicable, based on the Nevada Administrative Code (NAC) and best engineering and scientific principles and practices.
2. By February 1, 2014, the Permittee shall submit a work plan to install nine groundwater monitoring wells screened in the uppermost reliable zone of saturation by the following dates: a) previously proposed well SCP-1 and one additional well (PAG-1) downgradient of the Potentially Acid Generating (PAG) Waste-Rock Disposal Facility (WRDF), by May 1, 2014; b) previously proposed well P-1, one well (Mill-1) immediately downgradient of the Tailing Thickener Emergency Overflow Pond (TTEOP) and Tailing Thickeners, one well (STSF-3) on the west side of the South Tailing Storage Facility (South TSF), north of monitoring well TM-1B, and one well (STSF-4) on the south side of the South TSF, east of monitoring well TM-1B, by August 1, 2014; and c) two additional wells (STSF-1 and STSF-2) on the west side of the South TSF, north of STSF-3, and one additional well (STSF-5) on the south side of the South TSF, east of STSF-4, by May 1, 2015. To allow time for facility-related groundwater drawdown before installation, the new wells must not be installed more than one month before the stated deadlines unless otherwise approved. The work plan must include a map(s) showing mine facilities, updated groundwater potentiometric surface contours, and proposed well locations, plus proposed well parameters and a provision for drill oversight and field screen depth determination by a qualified geologist or hydrologist.
3. By October 1, 2015, the Permittee shall submit an application for a permit modification to construct a cover test facility that includes large-scale drainage lysimeters to determine the design specifications for future cover

material for the PAG WRDF, and the Low Grade Ore (LGO) Stockpile in the event it remains at closure, such that constituents are stabilized and degradation of waters of the State is prevented. The approved cover test facility shall be constructed by June 1, 2016.

4. At least thirty (30) days prior to initiating construction of any future portion or ancillary component of the approved South TSF, the Permittee shall submit written notice to the Division of its intent to construct. Such notice shall clearly identify the proposed construction. Material changes to, or departures from, the approved design may require additional engineering review and payment of additional Permit modification fees. The Permittee shall submit a quality assurance/quality control report, as-built drawings, and updated operating plans for the authorized construction, as completed in accordance with the NAC.
- C. The fluid management system covered by this Permit consists of the following process components:
1. The Coarse Ore Stockpile (COS), single 60-mil high-density polyethylene (HDPE) liner, crushed rock protective overliner layer, COS Reclaim Tunnel and Emergency Tunnel and all other related containment, collection, and conveyance systems;
 2. COS Pond (also known as Pond 2), single 60-mil HDPE liner, and solution evacuation system;
 3. LGO Stockpile, compacted 1-foot-thick low permeability soil subgrade, foundation drains, containment berms, and associated pipelines and conveyance systems;
 4. Collection Channel No. 1 (CC-1) and Collection Channel No. 2 (CC-2) with single 60-mil textured HDPE liner;
 5. Stormwater Diversion Channel No. 1 (SDC-1) and Stormwater Diversion Channel No. 2 (SDC-2) with either single 60-mil textured HDPE liners or geotextile and riprap protective layers, as applicable;
 6. Phase 1 Stormwater Collection Pond (PAG-P1) and Phase 2 Stormwater Collection Pond (PAG-P2) with single 80-mil HDPE liner and solution evacuation systems;
 7. PAG WRDF, compacted 1-foot thick low permeability soil subgrade, foundation drains, 5-foot thick non-PAG crushed rock protective layer, containment berms, and associated pipelines and conveyance systems;
 8. Non-PAG WRDF, rock berms, four (4) sediment control structures, and stilling basins;
 9. Spring SP-7 foundation drain, 60-mil HDPE lined collection gallery and fluid collection pipeline system, and fluid conveyance pipeline;

10. Mill building and associated containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
11. Flotation and regrind circuit building and associated containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
12. Concentrate filtration/drying/leaching building and associated containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
13. Roaster building and associated containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
14. Ferro molybdenum plant building and associated containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
15. Rougher tailing launder and distribution box containment trench, 60-mil HDPE liners and leakage collection pipes;
16. South Tailing Thickener 001 (TT1) and North Tailing Thickener 002 (TT2), 60-mil linear low density polyethylene (LLDPE) liners and leakage collection and recovery systems (LCRS), Tailing Thickener Overflow Tank, reinforced concrete Tailing Thickener Tunnel, and all conveyance pipelines;
17. TTEOP, single 80-mil HDPE liner, and solution evacuation system;
18. Plant Area Stormwater Pond (also known as Pond 1), unlined, and solution evacuation system;
19. Underflow pump house building and associated containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
20. Two (2) single-wall steel tailing slurry conveyance pipelines and one (1) single-wall steel or HDPE reclaim water return pipeline with secondary containment pipelines at the transect beneath the Pony Express Trail, unlined Collection Trench for pipeline containment, three (3) Emergency Containment Ponds (ECP) with unlined 18-inch-thick compacted soil subgrade, and pond solution level sensors and video camera monitoring systems;
21. Cyclone Station building and associated containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
22. South TSF random fill starter and cycloned sand main embankments with double-textured 60-mil LLDPE liner, select drainage blanket, solution

- collection and conveyance pipeline systems, and vibrating wire piezometers;
23. South TSF basin with smooth 60-mil LLDPE liner, basin drainage blanket, solution collection and conveyance pipeline system, and vibrating wire piezometers;
 24. South TSF basin reclaim trench with 40-mil HDPE retarding layer over the basin drainage blanket and below the supernatant pool area;
 25. South TSF Phase 1 and Phase 2 underdrain collection ponds (UCP-1 and UCP-2) and reclaim solution sump (RSS), smooth 80-mil HDPE primary and secondary liners, LCRS, and associated pipelines, valves, and pumps used in conveyance, control or detection of process fluids;
 26. Booster Station reinforced concrete containment pad and associated containment including, but not limited to, all tanks, basins, sumps, pipelines, valves, and pumps used in conveyance, control or detection of process fluids;
 27. Process Water Tank, reinforced concrete containment pad, and all basins, sumps, and pipelines used in conveyance, control or detection of process fluids;
 28. Reagent Storage and Mixing building and adjacent reinforced concrete containment pad, including but not limited to all tanks, basins, sumps, pipelines, valves, and pumps used in conveyance, control or detection of process fluids; and
 29. Transfer pipes, valves, and pumps used in conveyance, control or detection of process fluids between process components.

D. Monitoring Requirements

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
1. <u>Make-up Water Supply</u> Process Water Tank (WS)	Profile I ⁽²⁾	Annually
2. <u>Leak Detection [sump capacity in gallons as applicable]</u> Tailing Launder Box (TLB-LD) Tailing Distribution Box (TDB-LD) <u>Tailing Thickeners:</u> South Thickener (001): TT1-LD1, TT1-LD2, TT1-LD3, TT1-LD4, TT1-LD5, TT1-LD6 North Thickener (002): TT2-LD1, TT2-LD2, TT2-LD3, TT2-LD4, TT2-LD5, TT2-LD6	Average daily flow or accumulation (gpd)	Weekly ⁽¹⁾

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
<u>South TSF:</u> Phase 1 Underdrain Collection Pond (UCP1-LCRS) [x,xxx; to be added with as-built approval] Phase 2 Underdrain Collection Pond (UCP2-LCRS) [x,xxx] Reclaim Solution Pump Sump (RSPS-LCRS) [x,xxx]		
3. <u>Foundation Drains</u> LGO Stockpile: LGO-1, LGO-2, LGO-3, LGO-4, LGO-5 PAG WRDF: PAG-1, PAG-2, PAG-3, PAG-4, PAG-5, PAG-6, PAG-7; Spring SP-7 (SP-7)	Flow (gpd)/No Flow; Profile II ⁽³⁾ if flowing;	Weekly; Quarterly;
4. <u>Tails Pipeline Corridor Monitoring</u> Emergency Containment Ponds: ECP-1 (north), ECP-2 (middle), ECP-3 (south) Tailing pipeline leakage monitors: SPLDM-1 through SPLDM-5	Inspection, Test level alarm and video, Report solution/sediment removal date and volume ⁽⁸⁾ ; Inspection, Monitor function test	Weekly, Monthly, Quarterly; Weekly, Monthly
5. <u>Channels and Settling Basins</u> Collection Channel No. 1 (CC-1) Collection Channel No. 2 (CC-2) Stormwater Diversion Channel No. 1 (SDC-1) Stormwater Diversion Channel No. 2 (SDC-2) Sediment Control Structures: SCS-A through SCS-D Stilling Basins	Inspect, clear debris and sediment, and repair to design specification as necessary	Monthly and after any major storm event
6. <u>South TSF Monitoring</u> Barge Operating Depth (STSF-BOD) Underdrainage Flow (STSF-UF)	Supernatant pool depth (feet) at barge; Inflow to Underdrain Collection Pond (gpm)	Weekly; Weekly

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
<p>7. <u>South TSF Piezometers (paired odd/even vibrating wire)</u> Starter Embankment Downstream Crest Select Drainage Blanket: C-1/C-2 through C-15/C-16 Basin Drainage Blanket: B-1/B-2 through B-13/B-14 Embankment Downstream Select Drainage Blanket: E-1/E-2 through E-51/E-52</p>	Hydraulic head (feet)	Weekly
<p>8. <u>Process Solution</u> Pond 2 (COS-P2) Phase 1 Stormwater Collection Pond (PAG-P1) Phase 2 Stormwater Collection Pond (PAG-P2) Phase 1 Underdrain Collection Pond (UCP-1) Phase 2 Underdrain Collection Pond (UCP-2) Reclaim solution at Booster Station (RS) Tailing slurry liquid fraction (TSL)</p>	Profile II ⁽³⁾	Quarterly
<p>9. <u>Mined Materials</u> Low Grade Ore (LGO) Coarse Ore Stockpile (COS) PAG WRDF (PAG-WR) Non-PAG WRDF (NPAG-WR) Cyclone underflow coarse fraction (CY-C) Cyclone overflow fine 'slimes' fraction (CY-F)</p>	<p>MWMP⁽⁵⁾ -Profile I⁽²⁾ and ANP/AGP^(4,6);</p> <p>For LGO, COS, PAG-WR, and NPAG-WR, tons placed</p>	<p>Monthly for any quarter generated;</p> <p>Quarterly</p>
<p>10. <u>Site Monitoring Wells</u> <u>Non-PAG WRDF:</u> Upgradient GMI-PDT-2 Downgradient IGM-154 Downgradient IGM-157 <u>LGO Stockpile:</u> Downgradient SCP-1 Downgradient IGMI-232P Downgradient IGMI-233P Downgradient IGMI-226P</p>	<p>Profile I⁽²⁾ and well collar and water elevation (feet AMSL). Report 'dry' if no fluid is present</p>	Quarterly

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
Downgradient IGMI-227P <u>PAG WRDF:</u> Downgradient IGM-152 Downgradient PAG-1 <u>Mill Facilities:</u> Upgradient (Mill) IGM-155 Upgradient (Mill) IGMI-MH-177P Downgradient (Mill) P-1 Upgradient (COS) IGM-231P Downgradient (Process Water Tank) GMI-PDT-4 Downgradient (Scrubber and Roaster) IGMI-228P Downgradient (TTEOP and TailingThickeners) Mill-1 <u>South TSF Upgradient:</u> North TM-D (IGMI-237P) Northeast TM-A (IGMI-234P) Northeast TSF-2 (STFF-1) East TM-C (IGMI-236P) <u>South TSF Downgradient:</u> Southeast TM-B (IGMI-235P) Southwest TM-1B (GMI-TM1B) Downgradient STSF-1 Downgradient STSF-2 Downgradient STSF-3 Downgradient STSF-4 Downgradient STSF-5		
11. <u>Pit Lake Monitoring</u> <u>For any pit lake that forms:</u> At Lake Surface (LS) At Lake Intermediate Depth (LI) and Lake Bottom Depth (LB) (if lake depth ≥ 25 feet) Lake General Data (LG)	Water temperature (F°), field pH (S.U.), and specific conductance (μohms/cm); Profile II ⁽³⁾ , lake surface elevation (feet AMSL), maximum lake depth (feet), and lake surface area (acres)	Monthly (when fluid is present); Quarterly (when fluid is present)

The Permittee may request a reduction in the number of elements and frequency of analyses after four (4) quarters of complete monitoring based on justification

If the kinetic test results indicate acid generation conditions exist, the Permittee shall submit in writing, within thirty (30) days, the methods proposed for providing containment of these materials and the anticipated impact this acid generation potential may have on final stabilization of all components affected as defined in NAC 445A.359.

- (5) The Meteoric Water Mobility Procedure (MWMP) shall be performed in accordance with ASTM method E 2242 (or the most current method).
 - (6) Acid Neutralizing Potential/Acid Generating Potential (ANP/AGP, also known as static testing or acid-base accounting) shall be performed using a LECO-type analysis, with full sulfur speciation, in accordance with the Nevada Modified Sobek Procedure.
 - (7) Kinetic testing (humidity cell testing) shall be performed in accordance with ASTM D 5744-07 Option 'A' (or the most current approved method); tests shall be run for a minimum of twenty (20) weeks and for a longer duration if warranted or recommended by the analytical laboratory or required by the Division; samples shall be collected weekly (all weeks) and measurements shall be recorded for redox potential, pH, specific conductance ($\mu\text{mhos/cm}$), acidity and/or alkalinity (as deemed appropriate by the laboratory), sulfate, iron (total, ferric, and ferrous), and dissolved calcium and magnesium; weekly filtered extracts per the method will be digested and analyzed for total recoverable concentrations during week 0, 1, 2, 4, 8, 12, 16, and 20; 4-week extracts thereafter (i.e., week 24, 28, 32, etc.) shall be analyzed by a Nevada certified analytical laboratory for Profile I⁽²⁾ constituents and pH, specific conductance ($\mu\text{mhos/cm}$), acidity and/or alkalinity shall be recorded as recommended by the analytical laboratory; final results reported shall include a Profile I⁽²⁾ analysis of the final leachate and an ANP/AGP analysis of the leached material using a LECO-type analysis as specified above.
 - (8) The Emergency Containment Pond subgrade must be tested and reconditioned as necessary to meet the design specification of an 18-inch-thick layer compacted to 95% maximum Standard Proctor dry density (ASTM D698) following any event or correction of conditions that could result in degradation of the subgrade compaction.
- E. Quarterly and annual monitoring reports and spill reporting shall be in accordance with Part II.B.
- F. All sampling and analytical accuracy shall be in accordance with Part II.E.
- G. Permit Limitations
1. The daily accumulation or flow shall not exceed 150 gallons per day averaged over the quarter in the leak detection systems identified in Part I.D.2.
 2. The daily accumulation or flow shall not exceed 50 gallons per day averaged over the year in the leak detection systems identified in Part I.D.2.
 3. Failure to meet a Schedule of Compliance date or requirement.

4. The hydraulic head on the piezometers located in the South TSF basin drainage blanket shall not exceed ten (10) feet.
5. The maximum embankment crest elevation for the South TSF is 6,710 feet AMSL.
6. Two or more adjacent South TSF embankment piezometers shall not concurrently exceed the following hydraulic head readings: ten (10) feet of hydraulic head for C-series piezometers; 7.5 feet of hydraulic head for E-series piezometers E-1 through E-26; and five (5) feet of hydraulic head for E-series piezometers E-27 through E-52. Exceedances shall be reported and a geotechnical engineer shall be consulted.
7. An adequate barge operating depth shall be maintained within the Reclaim Trench to prevent damage to the HDPE retarding layer.
8. After the South TSF supernatant pool elevation exceeds the crest elevation of the starter embankment (6,418 feet AMSL), the pool shall be confined within the limits of the Reclaim Trench and a minimum 1,500 feet from the upstream embankment face.
9. Except during active construction when the South TSF basin liner is exposed, flows greater than 8,000 gpm reporting to the underdrainage ponds shall be reported to the Division and require inspection for damage to the HDPE retarding layer and the underdrainage collection pipelines within the Reclaim Trench.
10. The COS Pond, Phase 1 Stormwater Collection Pond, Phase 2 Stormwater Collection Pond, TTEOP, or any other single-lined pond must be evacuated within twenty (20) days whenever it contains process solution.
11. Except as otherwise required by this Permit, a minimum 2-foot freeboard must be maintained in UCP-1 and UCP-2, and a minimum 3-foot freeboard must be maintained in all other ponds.
12. The Non-PAG and PAG WRDFs shall be constructed with maximum 100-foot lifts with interlift bench widths sufficient to maintain an overall slope angle of 2.7H:1V; the LGO Stockpile shall be constructed with maximum 150-foot lifts with interlift bench widths sufficient to maintain an overall slope angle of 2.5H:1V.
13. The Permittee is authorized to use water that does not exceed the Division Profile I reference values for dust suppression activities. If the water proposed exceeds the Profile I reference values, prior written authorization from the Division is required.
14. The Permittee shall provide the Division written notification no more than thirty (30) days after the Mount Hope Pit bottom passes below the predicted post-mining groundwater elevation.
15. Reclaim or other process solution shall not be stored in the Fire Water Tank.

Exceedances of these limitations may be Permit violations and shall be reported as specified in Part II.B.4.

- H. The facility shall maintain one (1) or more, as determined by the Division, automated device or devices, which shall be monitored daily, to record daily precipitation, including snowfall water values, temperature minimums and maximums, relative humidity minimums and maximums, solar radiation values, and maximum and minimum wind speed and direction. A written record of all daily measurements shall be maintained on site.
 - I. The Permittee shall inspect all control devices, systems and facilities weekly. Drainage and containment systems shall also be inspected during, when possible, and after major storm events. These inspections are performed to detect evidence of:
 - 1. Deterioration, malfunction, or improper operation of control systems;
 - 2. Sudden changes in the level of the contents of any monitoring device;
 - 3. The presence of liquids in leak detection systems; and
 - 4. Severe erosion or other signs of deterioration in dikes, diversions, or other containment devices.
 - J. Prior to initiating permanent closure activities at the facility or any process component within the facility, the Permittee must have an approved final permanent closure plan.
 - K. The Permittee shall remit an annual review and services fee in accordance with NAC 445A.232 starting July 1 after the effective date of this Permit and every year thereafter until the Permit is terminated or the facility has received final closure certification from the Division.
 - L. The Permittee shall not dispose of or treat Petroleum-Contaminated Soil (PCS) on the mine site without first obtaining from the Division approval of a PCS Management Plan.
- II. General Facility Conditions and Limitations
- A. General Requirements
 - 1. The Permittee shall achieve compliance with the conditions, limitations, and requirements of the Permit upon commencement of each relevant activity. The Administrator may, upon the request of the Permittee and after public notice (if required), revise or modify a Schedule of Compliance in an issued Permit if he determines good and valid cause (such as an act of God, a labor strike, materials shortage or other event over which Permittee has little or no control) exists for such revision.
 - 2. The Permittee shall at all times maintain in good working order and operate as efficiently as possible, all devices, facilities, or systems installed or used by

the Permittee to achieve compliance with the terms and conditions of this Permit.

3. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or correct information. Any inaccuracies found in this information may be grounds for revocation or modification of this Permit and appropriate enforcement action.

B. Reporting Requirements

1. The Permittee shall submit quarterly reports which are due to the Division on or before the 28th day of the month following the quarter and must contain the following:
 - a. Monitoring results from the leak detection systems identified in Part I.D.2, reported on NDEP Form 0590 or equivalent;
 - b. A table of flow monitoring results for the foundation drains identified in Part I.D.3;
 - c. A table of the information required for the monitoring locations identified in Part I.D.6;
 - d. Analytical results of the solution collected from monitoring locations identified in Parts I.D.3 and I.D.8 reported on NDEP Form 0090 or equivalent;
 - e. Analytical results of the solution collected from monitoring wells identified in Part I.D.10 reported on NDEP Form 0190 or equivalent;
 - f. Water elevation and well collar elevation for site monitoring wells identified in Part I.D.10;
 - g. Analytical results of the MWMP-Profile I and ANP/AGP testing for the materials identified in Part I.D.9, reported on NDEP Form 0090 or equivalent;
 - h. A table of the tonnages placed during the quarter for the respective materials identified in Part I.D.9;
 - i. A summary of the inspection and testing results and any actions taken at the monitoring locations identified in Parts I.D.4 and I.D.5;
 - j. Tables and graphs of the piezometer readings for the locations identified in Part I.D.7 and a summary of any response actions taken;
 - k. Analytical and monitoring results collected in accordance with Part I.D.11 if a pit lake exists during the quarter;
 - l. A record of spills and releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent; and

- a. A release of any quantity of hazardous substance, as defined at NAC 445A.3454, to surface water, or that threatens a vulnerable resource, as defined at NAC 445A.3459, must be reported to the Division as soon as practicable after knowledge of the release, and after the Permittee notifies any emergency response agencies, if required, and initiates any action required to prevent or abate any imminent danger to the environment or the health or safety of persons. An oral report shall be made by telephone to (888) 331-6337 for in-State callers or (775) 687-9485 for out-of-State callers, and a written report shall be provided within ten (10) days in accordance with Part II.B.4.b.
 - b. A release of a hazardous substance in a quantity equal to or greater than that which is required to be reported to the National Response Center pursuant to 40 Code of Federal Regulations Part 302 must be reported as required by NAC 445A.3473 and Part II.B.3.a.
 - c. A release of a non-petroleum hazardous substance not subject to Parts II.B.3.a. or II.B.3.b., released to soil or other surfaces of land, and the total quantity is equal to or exceeds 500 gallons or 4,000 pounds, or that is discovered in or on groundwater in any quantity, shall be reported to the Division no later than 5 P.M. of the first working day after knowledge of the release. An oral report shall be made by telephone to (888) 331-6337 for in-State callers or (775) 687-9485 for out-of-State callers, and a written report shall be provided within ten (10) days in accordance with Part II.B.4.b. Smaller releases, with total quantity greater than 25 gallons or 200 pounds and less than 500 gallons or 4,000 pounds, released to soil or other surfaces of land, or discovered in at least three cubic yards of soil, shall be reported quarterly on NDEP Form 0390 or equivalent.
 - d. Petroleum Products and Coolants: If a release is subject to Parts II.B.3.a. or II.B.3.b., report as specified in Part II.B.3.a. Otherwise, if a release of any quantity is discovered on or in groundwater, or if the total quantity is equal to or greater than 100 gallons released to soil or other surfaces of land, report as specified in Part II.B.3.c. Smaller releases, with total quantity greater than 25 gallons but less than 100 gallons, released to soil or other surfaces of land, or if discovered in at least three cubic yards of soil, shall be reported quarterly on NDEP Form 0390 or equivalent.
4. The Permittee shall report to the Administrator any noncompliance with the Permit.
- a. Each such event shall be reported orally by telephone to (775) 687-9400, not later than 5:00 PM of the next regular work day from the time the Permittee has knowledge of the circumstances. This report shall include the following:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;

- m. For any kinetic test initiated, continued, or terminated with Division approval during the quarter, provide a brief report of the test status and an evaluation of the results to date, which shall include all analytical data generated from the date testing was initiated through the reporting quarter.

Facilities which have not initiated mining or construction, must submit a quarterly report identifying the status of mining or construction. Subsequent to any noncompliance or any facility expansion which provides increased capacity, the Division may require an accelerated monitoring frequency.

2. The Permittee shall submit an annual report by February 28th of each year, for the preceding calendar year, which contains the following:
- a. Analytical results of the water quality sample collected from the water supply identified in Part I.D.1, reported on NDEP Form 0190 or equivalent;
 - b. A synopsis of spills and releases on NDEP Form 0390 or equivalent;
 - c. A brief summary of site operations, including the number of tons of ore milled during the year, the total tonnage of material contained in the LGO Stockpile, PAG WRDF, Non-PAG WRDF, and South TSF, respectively, and the crest elevation of the South TSF, at calendar year end, construction and expansion activities and major problems with the fluid management system;
 - d. A table of monthly values for precipitation, including snowfall water values, temperature minimums and maximums, relative humidity minimums and maximums, solar radiation, and average daily wind speed and direction, reported for the five-year history previous to the date of submittal;
 - e. An updated version of the facility monitoring and sampling procedures and protocols;
 - f. An updated evaluation of the closure plan using specific characterization data for each process component with respect to achieving stabilization; and
 - g. Graphs of leak detection flow rates, pH, total dissolved solids (TDS), sulfate as SO₄, chloride, nitrate + nitrite (Total as N), boron, bismuth, fluoride, zinc, and antimony concentration (as applicable), versus time for all fluid sampling points. These graphs shall display a five-year history previous to the date of submittal. Additional constituents may be required by the Division, if deemed necessary.
3. Release Reporting Requirements: The following applies to facilities with an approved Emergency Response Plan. If a site does not have an approved Emergency Response Plan, then all releases must be reported as per NAC 445A.347 or NAC 445A.3473, as appropriate.

C. Administrative Requirements

1. A valid Permit must be maintained until permanent closure is complete. Therefore, unless permanent closure has been completed, the Permittee shall apply for Permit renewal not later than one-hundred twenty (120) days before the Permit expires.
2. Except as required by NAC 445A.419 for a Permit transfer, the Permittee shall submit current Permit contact information described in paragraphs (a) through (c) of subsection 2 of NAC 445A.394 within thirty (30) days after any change in previously submitted information.
3. All reports and other information requested by the Administrator shall be signed and certified as required by NAC 445A.231.
4. When ordered consistent with Nevada Statutes, the Permittee shall furnish any relevant information in order to determine whether cause exists for modifying, revoking and reissuing, or permanently revoking this Permit, or to determine compliance with this Permit.
5. The Permittee shall maintain a copy of, and all modifications to, the current Permit at the permitted facilities at all times.
6. The Permittee is required to retain during operation, closure and post-closure monitoring, all records of monitoring activities and analytical results, including all original strip chart recordings for continuous monitoring instrumentation, and all calibration and maintenance records. This period of retention must be extended during the course of any unresolved litigation.
7. The provisions of this Permit are severable. If any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not thereby be affected.
8. The Permittee is authorized to manage fluids and solid wastes in accordance with the conditions of this Permit. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under the Water Pollution Control Statutes for releases or discharges from facilities or units not regulated by this Permit. NRS 445A.675 provides that any person who violates a Permit condition is subject to administrative or judicial action provided in NRS 445A.690 through 445A.705.

D. Division's Authority

The Permittee shall allow authorized representatives of the Division, at reasonable times, and upon the presentation of credentials to:

- iii. Date, time, and type of incident, condition, or circumstance;
 - iv. If reportable hazardous substances were released, identify material and report total gallons and quantity of contaminant;
 - v. Human and animal mortality or injury;
 - vi. An assessment of actual or potential hazard to human health and the environment outside the facility; and
 - vii. If applicable, the estimated quantity of material that will be disposed and the disposal location.
- b. A written summary shall be provided within ten (10) days of the time the Permittee makes the oral report. The written summary shall contain:
- i. A description of the incident and its cause;
 - ii. The periods of the incident (including exact dates and times);
 - iii. If reportable hazardous substances were released, the steps taken and planned to complete, as soon as reasonably practicable, an assessment of the extent and magnitude of the contamination pursuant to NAC 445A.2269;
 - iv. Whether the cause and its consequences have been corrected, and if not, the anticipated time each is expected to continue; and
 - v. The steps taken or planned to reduce, eliminate, and prevent recurrence of the event.
- c. The Permittee shall take all available and reasonable actions, including more frequent and enhanced monitoring to:
- i. Determine the effect and extent of each incident;
 - ii. Minimize any potential impact to the waters of the State arising from each incident;
 - iii. Minimize the effect of each incident upon domestic animals and all wildlife; and
 - iv. Minimize the endangerment of the public health and safety which arises from each incident.
- d. If required by the Division, the Permittee shall submit, as soon as reasonably practicable, a final written report summarizing any related actions, assessments, or evaluations not included in the report required in Part II.B.4.b., and including any other information necessary to determine and minimize the potential for degradation of waters of the State and the impact to human health and the environment. Submittal of the final report does not relieve the Permittee from any additional actions, assessments, or evaluations that may be required by the Division.

1. Enter the Permittee's premises where a regulated activity is conducted or where records are kept per the conditions of this Permit;
2. Have access to and copy any record that must be kept per the conditions of this Permit;
3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated by this Permit; and
4. Sample or monitor for any substance or parameter at any location for the purposes of assuring Permit and regulatory compliance.

E. Sampling and Analysis Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. For each measurement or sample taken pursuant to the conditions of this Permit, the Permittee shall record the following information:
 - a. The exact place, date, and time of the inspection, observation, measurement, or sampling; and
 - b. The person(s) who inspected, observed, measured, or sampled.
3. Samples must be taken, preserved, and labeled according to Division approved methods.
4. Standard environmental monitoring chain of custody procedures must be followed.
5. Samples shall be analyzed by a laboratory certified by the State of Nevada. The Permittee must identify the certified laboratory used to perform the analyses, laboratory reference number, sample date and laboratory test date in quarterly reports.
6. The accuracy of analytical results, unless otherwise specified, shall be expressed in mg/L and reliable to at least two (2) significant digits. The analytical methods used must have a lower level of detection equal to or less than one-half the reference value for Profile I constituents. Profile II constituents that have established reference values shall be quantified using an analytical method with a lower level of detection equal to or less than the reference value.

F. Permit Modification Requirements

1. Any material modification must be reported by submission of a new application, or, if such changes will not violate the limitations specified in the Permit, by notice to the Permit issuing authority of such changes. Any change which materially modifies, as defined in NAC 445A.365, the permitted facility must comply with NAC 445A.392, NAC 445A.4155, NAC 445A.416, and NAC 445A.417.

2. Prior to the commencement of mining activities at any site within the State which is owned or operated by the Permittee but not identified and characterized in the application, the Permittee shall submit to the Division a report which identifies the locations of the proposed mine areas and waste disposal sites, and characterizes the potential of mined materials to release pollutants. Prior to development of these areas the Division shall determine if any of these new sources will be classified as process components and require engineered containment as well as Permit modification.
3. The Permittee must notify the Division in writing at least thirty (30) days before the introduction of process solutions into a new process component or into an existing process component which has been materially modified, or of the intent to commence active operation of that process component.
4. The Permittee must obtain a written determination from the Administrator of any planned material modification(s) as to whether it is considered a Permit modification.
5. The Permittee must give advance notice to the Administrator of any planned changes or activities which are not material modifications in the permitted facility that may result in noncompliance with Permit requirements.

Prepared by: Thomas E. Gray

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Revision: New Permit.

other than cost. Such reductions may be considered formal modifications to the Permit.

Abbreviations:

gpd = gallons per day; gpm = gallons per minute; AMSL = above mean sea level; S.U. = standard units; MWMP = Meteoric Water Mobility Procedure; ANP/AGP = Acid Neutralizing Potential:Acid Generation Potential ratio; μ ohms/cm = micro ohms per centimeter; F° = Fahrenheit degrees; pCi/L = pico Currie per liter

Footnotes:

(1) The sump must be inspected and evacuated on a more frequent basis than weekly if the fluid level is above the top of the sump or the invert of any pipe which discharges into the sump, whichever level is lower, or if the potential exists to exceed the sump capacity. Records are required documenting volume, date and time of extraction to show that sumps are maintained in this condition.

(2) Profile I:

Alkalinity (as CaCO ₃) Bicarbonate Total	Calcium	Mercury	Sulfate
	Chloride	Nickel	Thallium
	Chromium	Nitrate+Nitrite (Total as N)	Total Dissolved Solids
Aluminum	Copper	Nitrogen (Total as N)	Zinc
Antimony	Fluoride	pH (\pm 0.1 S.U.)	Uranium (Total)
Arsenic	Iron	Potassium	²²⁶ Radium+ ²²⁸ Radium (pCi/L)
Barium	Lead	Selenium	Alpha Particles (pCi/L)
Beryllium	Magnesium	Silver	-
Cadmium	Manganese	Sodium	-

(3) Profile II includes Profile I plus the following:

Bismuth	Gallium	Phosphorus (Total)	Tin
Boron	Lithium	Scandium	Titanium
Cobalt	Molybdenum	Strontium	Vanadium

(4) When static testing⁽⁶⁾ characterization of Mined Materials shows the potential for acid generation as set forth in the current version of the Division's guidance document "Waste Rock, Overburden, and Ore Evaluation", the Permittee shall, as applicable, notify the Division in writing and initiate kinetic testing⁽⁷⁾ within ten (10) days.