### STATE OF NEVADA

Department of Conservation and Natural Resources

Division of Environmental Protection

Bureau of Mining Regulation and Reclamation

### Water Pollution Control Permit

Permittee:

Klondex Hollister Mine Inc.

Hollister Development Block Project

4000 W. Winnemucca Blvd. Winnemucca, NV 89445

Permit Number:

NEV2003107

Review Type/Year/Revision: Renew

Renewal 2023. Revision 00

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 **Hollister Development Block Project**, in accordance with the limitations, requirements, and other conditions set forth in this Permit. The Permittee is authorized to process up to **275,000 tons** of ore per year.

The facility is located in Elko County, within Sections 4, 5, 8, 9, 16, and 17, Township 37 North (T37N), Range 48 East (R48E); and Sections 32 and 33, T38N, R48E, Mount Diablo Baseline and Meridian, approximately 46 miles northwest of the town of Elko, 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 application of 10 June 2003, 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 ability of the Permittee to comply with applicable regulations or Permit conditions.

This Permit is effective as of 9 February 2024, and shall remain in effect until 24 December 2028, unless modified, suspended, or revoked.

Signed this 24TH day of January 2024.

Robert Kuczynski, P.B.

Chief, Bureau of Mining Regulation and Reclamation

# I. Specific Facility Conditions and Limitations

- A. In accordance with operating plans and facility design plans reviewed and approved by the Division the Permittee shall:
  - 1. Construct, operate, and close the facility in accordance with those 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. By 31 December 2024, the Permittee shall install the new monitoring wells (BH-12-S and BH-12-D) as proposed in the Itasca Memo provided to the Division on 30 April 2018.
- 2. By 31 August 2024, the Permittee shall provide an updated groundwater study, in accordance with Part I.N.1. The studies must use all available data from the Hollister Development Block Project monitoring wells and piezometers. If possible, also use monitoring well and piezometer data from the Hollister Mine Project, Water Pollution Control Permit (WPCP) NEV0088022.
- 3. Within 90 days of the effective date of the Permit 9 May 2024, the Permittee shall present to the Division a status summary of the investigative report and corrective action plan for the degradation in the tertiary volcanics (wells W-E-1, DGW-1R, and DGW-2B).
- 4. Within 120 days of the effective date of the Permit 8 June 2024, provide a Tentative Plan for Permanent Closure for the current configuration of the WRSF.
- 5. Within 120 days of commencing construction work on the WRSF expansion, provide an updated Final Plan for Permanent Closure for the final configuration of the WRSF.
- 6. Within 90 days of the effective date of the Permit 9 May 2024, the Permittee shall provide the following for all shafts and portals: an updated Tentative Plan for Permanent Closure (TPPC), an as-built, and engineering design changes with the detailed closure design of each underground opening.

The schedule of compliance items above are not considered completed until approved in writing by the Division.

- C. The fluid management system covered by this Permit consists of the following process components:
  - 1. An engineered permanent Waste Rock Storage Facility (WRSF) with low permeability soil base (LPSB), low permeability barrier layer (LPBL), high-density polyethylene (HDPE), and a fluid collection system;
  - 2. The buried 100-mil HDPE-lined Waste Rock Solution Collection East Sump and buried 80-mil HDPE-lined Waste Rock Solution Collection West Sump, 80-mil HDPE

- lined Waste Rock Expansion Collection Triangular Sump, Lower groundwater Sump, double-walled conveyance pipelines, and the Subgrade Solution Collection Sump;
- 3. The De-Silting Plant including a primary desilting basin, sand dewatering screw, thickener, belt press, 2-each flocculant storage and mixing tanks, belt filter press building with concrete containment floor, and dedicated coarse and fine material storage containment pads;
- 4. A 60-mil HDPE-lined Recycled Water Pond and a 60-mil HDPE-lined Surge Water Pond, each with a wet well evacuation sump;
- 5. The Exploration Decline mine discharge water management system and associated pipelines, sumps, and pumps;
- 6. The Utility Water Tank and associated pipelines and valves;
- 7. Reverse Osmosis Plant containment slab;
- 8. The single-lined 60-mil HDPE Stormwater Collection Pond and associated stormwater drains, channels; and sumps; and
- 9. All tanks, basins, sumps, pumps, valves, piping, and other equipment necessary to interconnect and operate the components.

# D. Monitoring Requirements:

<u>Identification</u>		<u>Parameter</u>	<b>Frequency</b>
1.	Water Supply WW-5	Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup>	Annually
2.	Underground Mine Water Underground Decline Mine Water (UD)	Average daily flow (gpm)	Weekly
3.	Clarified Recycle Water Discharge to Utility Tank (RW)	Average daily accumulation (gpd) and pH <sup>(14)</sup> ;	Weekly;
		Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup>	Quarterly
4.	Mined Materials Solution Waste Rock Solution Collection: East Sump (WRCS-E) <sup>(13)</sup>	Fluid volume (gal), pH <sup>(14)</sup> ;	Weekly <sup>(7)(14)</sup> (once constructed);
	West Sump (WRCS-W) Triangular Expansion Sump	Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup> , solution volume removed <sup>(15)</sup> (gal)	Quarterly
	Transfer Tank (WRCS-TT) Lower Sump (WRCS-L)		

5. Mined Materials Waste Rock (WR) Ore Stockpile (OS) Neutralization Material (Dolomite or Equivalent) Added to WRSF (NM-WRSF)	MWMP <sup>(8)</sup> -Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup> , NMSP <sup>(9)(10)</sup> , and tonnage by location	Quarterly
6. Overburden Stockpile Overburden Stockpile Seepage (OS)	Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup>	Quarterly
Neutralization Material (Dolomite or Equivalent) Added to Overburden Stockpile	MWMP <sup>(8)</sup> -Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup> , NMSP <sup>(9)(10)</sup> , and tonnage by location	Quarterly
7. Site Monitoring Wells West Pit-East Pit Well (W-E-1) Downgradient Wells: Waste rock zone DGW-2A Tertiary Volcanics DGW-1R DGW-2B MW-G-S MW-H-S Vinini Formation DGW-2C MW-G-D MW-H-D Upgradient Wells: Tertiary Volcanics BH-12S BH-13S Vinini Formation BH12-D BH-13D	Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup> , water and collar elevation in feet AMSL	Quarterly (once installed)

8. De-Silting Plant Sediment (DPS)	Tons removed, TPH <sup>(12)</sup> ;  MWMP <sup>(8)</sup> -Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup> , NMSP <sup>(10)(11)</sup>	Each batch; Annually
9. Ore Shipments and Stockpiles Ore shipped by facility; Ore stockpiled on site	Tons per month;  Tons at end of reporting quarter	Quarterly Quarterly
10. Pond Solution Recycled Water Pond (RWP) Surge Water Pond (SWP) Stormwater Collection Pond (SCP)	Profile I <sup>(1)</sup> and Uranium <sup>(4)</sup>	Quarterly, when present
11. PCS Management Disposal by PCS source type	PCS volume removed and destination	Quarterly
12. Weather Station Facility Ambient Conditions	Ambient temperature, (min/max), relative humidity (%), wind speed (mph), wind direction (azimuth degree), total precipitation (in), solar irradiance (W/m²)	

The Permittee may request a reduction of the monitoring frequency after four quarters of complete monitoring based on justification other than cost. Such reductions may be considered modifications to the Permit and require payment of modification fees.

### **Abbreviations and Definitions:**

AMSL = above mean sea level; ANP/AGP = Acid Neutralizing Potential:Acid Generation Potential ratio; ASTM = American Society for Testing and Materials; CaCO<sub>3</sub> = calcium carbonate; e = the base of the natural logarithm with approximate value of 2.718; Eh = chemical reduction potential; EPA = U.S. Environmental Protection Agency; gal = gallons; gpd = gallons per day; gpm = gallons per minute; in = inches, ln = natural logarithm with

base e; max = maximum, mg/L = milligrams per liter; MGD = million gallons per day; min = minimum, mph = miles per hour, MWMP = Meteoric Water Mobility Procedure; N = nitrogen; NAC = Nevada Administrative Code; NDEP = Nevada Division of Environmental Protection; NMSP = Nevada Modified Sobek Procedure; pCi/L = picocuries per liter; PCS = Petroleum-Contaminated Soil; pH = the negative of the base 10 logarithm of the activity of the hydrogen ion; PQL = Practical Quantitation Limit; Q = calendar quarter of the year; RDL = Reported Detection Limit; SU = standard units for pH measurement; SWE = snow water equivalent; TPH = total petroleum hydrocarbons; WAD = weak acid dissociable; W/m² = Watts per square meter, WRSF = Waste Rock Storage Facility; \* = multiplication symbol; > = greater than; ≥ = greater than or equal to; < = less than; °F = degrees Fahrenheit; μg/L = micrograms per liter; μS/cm = micro-Siemens per centimeter, % = percent

### Footnotes:

# (1) Profile I:

General Chemistry Parameters				
Acidity <sup>(2)</sup>	Chloride	pH (± 0.1 SU)		
Alkalinity (as CaCO <sub>3</sub> )	Fluoride	Sulfate		
Bicarbonate <sup>(3)</sup>	Nitrate + Nitrite (as N)	Total Dissolved Solids		
Total <sup>(3)</sup>	Nitrogen Total (as N)	WAD Cyanide		
Metals Dissolved				
Aluminum	Chromium	Potassium		
Antimony	Copper	Selenium		
Arsenic	Iron	Silver		
Barium	Lead	Sodium		
Beryllium	Magnesium	Thallium		
Cadmium	Manganese	Zinc		
Calcium	Mercury			

- (2) All sample analyses resulting in a pH value less than or equal to 5.0 SU shall also be analyzed for acidity (mg/L, as CaCO<sub>3</sub> equivalent).
- (3) All sample analyses resulting in a pH value greater than or equal to 4.5 SU shall be analyzed for Alkalinity (Bicarbonate and Total).
- (4) Uranium (total) shall be reported in mg/L and have the reference value of 0.03 mg/L. If uranium (total) concentration is  $\geq$  0.030 mg/L, analysis for the Profile I<sup>(1)</sup>, Uranium, and Profile R<sup>(5)</sup> is required in the subsequent quarter.

## (5) Profile R:

Parameter	Reference Value/Unit	
Gross Alpha (6)	pCi/L	
Adjusted Gross Alpha*	15 pCi/L	
226Radium	pCi/L	
228Radium	pCi/L	
226Radium + 228Radium	5 pCi/L	

<sup>\*</sup>Adjusted gross alpha is gross alpha minus uranium activity in pCi/L.

- (6) If the sample location is known to have a TDS greater than 1,000 mg/L, gross alpha must be analyzed using an appropriate method, e.g., the co-precipitation method, EPA 00-02, EPA 900.0. Additionally, if the standard deviation (SD) reported of the adjusted gross alpha analysis activity is greater less than or equal to 15 pCi/L and the uncertainty of the adjusted gross alpha analysis is greater than or equal to 15 pCi/L is acceptable (e.g.  $36 \pm 21$  pCi/L would be acceptable since the low range is at 15 pCi/L). Please utilize the appropriate method to minimize the uncertainty. See Profile R analyte list on the Division's website for additional information, the sample shall be analyzed, in the subsequent quarter, for gross alpha using the co-precipitation method, EPA 00-02.
- (7) 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.
- (8) The Meteoric Water Mobility Procedure (MWMP) shall be performed by a Nevadaapproved laboratory, in accordance with ASTM Method E 2242-13 (or the most current method).
- (9) Nevada Modified Sobek Procedure (NMSP) shall be performed by a Nevadaapproved laboratory, using a LECO-type analysis, in accordance with the most current update. The NMSP is a specific static test or acid-base accounting test.
- (10) When static testing<sup>(9)</sup> characterization of Mined Materials falls within one of the scenarios requiring kinetic testing, as set forth in the current version of the Division guidance document "Waste Rock, Overburden, and Ore Characterization and Evaluation", the Permittee shall notify the Division in writing within 10 days of receipt of the sample result, and either:
  - a. Initiate kinetic testing<sup>(11)</sup> or
  - b. Request to waive kinetic testing for the individual samples. The request must be made in writing and must be approved in writing by the Division to be considered valid.
- (11) Kinetic testing (humidity cell testing) shall be performed by a Nevada-approved laboratory, in accordance with ASTM Method D 5744-18 Option 'A' (or the most current approved method); tests shall be run for a minimum of 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 (Eh), pH, specific conductance (µS/cm) from a raw, non-filtered aliquot; acidity and/or alkalinity (as determined by the raw extract pH), sulfate, iron (total), plus ferric and ferrous speciation only if pH < 5 SU), shall be analyzed following coarse filtration of the extract; and dissolved calcium and magnesium; Following coarse filtration of the extract, samples for Profile I metals shall be filtered, digested, and analyzed for the dissolved fraction; samples requiring Uranium analysis shall be unfiltered, digested (as applicable) and analyzed total recoverable concentrations during weeks 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<sup>(1)</sup> and Uranium parameters, as applicable, and specific conductance (µS/cm) and acidity and/or alkalinity shall be recorded as required by the extract pH; Final results reported shall include initial and final static test results<sup>(9)</sup>, a Profile I<sup>(1)</sup> and Uranium analysis of the final leachate, all kinetic test results above, and any additional analyses required by the Division. The Division will not consider a request to terminate an HCT until at least week 20. Under no circumstance will the HCT be placed on 'hold' pending Division review.

If the kinetic test results indicate acid generation conditions exist, the Permittee shall manage these materials in accordance with the Division-approved Waste Rock Management Plan, or if management of potentially acid generating material is not covered in the Waste Rock Management Plan submit in writing, within 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 Nevada Administrative Code (NAC) 445A.359.

- (12) Total Petroleum Hydrocarbons (TPH) analyzed by a Nevada-certified laboratory using EPA Method 8015 Modified. If any gasoline-range petroleum is suspected, or if the source-type is unknown, both TPH-P (purgeable) and TPH-E (extractable) are required. Otherwise, only TPH-E is required.
- (13) Two 18-inch diameter riser pipes monitor one sump.
- (14) If the weekly pH results for collected fluid are outside the range of 6.5 to 8.5 SU, a Profile I analysis will be performed on the fluid following neutralization of the solution. In all cases, fluid will be removed to approved containment within 20 days if parameter concentrations are found to exceed the Profile I limits specified in Part I.G.1. If the fluid meets the Profile I limits in Part I.G.1, it may remain in the sump as long as the 24-hour, 25-year storm event volume is not compromised. If removal of fluid that meets the Profile I limits in Part I.G.1 is required to achieve the required freeboard, the fluid may be used for operational purposes. Records are required documenting volume, date, and time of extraction.
- (15) Characterization is required prior to removal of solution for treatment and/or use within the fluid management system or disposal at an identified licensed off-site facility.
- E. Quarterly and annual monitoring reports and release 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. Based on pre-construction background groundwater characterization, unless otherwise approved by the Division, the following maximum concentration limits for Profile I dissolved parameters apply to groundwater and other uses of solution outside of approved containment.

Aluminum	0.2 mg/L	Manganese	0.45 mg/L
Antimony	0.006 mg/L	Mercury	0.002 mg/L
Arsenic	0.01 mg/L	Nitrate + Nitrite (as N)	10 mg/L
Barium	2.0 mg/L	Nitrogen, Total (as N)	10 mg/L
Beryllium	0.004 mg/L	pH (± 0.1 SU)	6.5-8.5 SU
Cadmium	0.005 mg/L	Selenium	0.05 mg/L
Chloride	400 mg/L	Silver	0.1 mg/L
Chromium	0.1 mg/L	Sulfate	500 mg/L
Copper	1.0 mg/L	TDS	1,000 mg/L
Fluoride	4.0 mg/L	Thallium	0.002 mg/L
Iron	0.6 mg/L	Zinc	5.0 mg/L
Lead	0.015 mg/L		41 42
Magnesium	150 mg/L		

- 2. All ponds, including the Stormwater Collection Pond, and all sumps are to be managed to ensure that the 24-hour, 25-year storm event design capacity and freeboard are maintained.
- 3. Waste rock and ore generated must be stored within the engineered WRSF or other approved facility.
- 4. De-Silting Plant sediment (DPS), once quantified and characterized, may be placed within the WRSF in accordance with the Operating Plan.
- 5. Failure to meet a Schedule of Compliance date or requirement.
- 6. All analytical samples shall be analyzed as mentioned in the Footnotes or Section II.E, as applicable.
- 7. No fluid discharge or on-site processing of material is authorized.
- 8. As practical, snow accumulations of 4-inch depth or greater shall be removed from the top of the WRSF and placed in Stormwater Collection Pond.
- 9. Except as otherwise allowed by this Permit, a minimum 2-foot freeboard shall be maintained in all ponds.
- 10. The storage of water in a single-lined pond for more than 20 consecutive days for any single event, unless for all Profile I parameters the water does not exceed both the value

specified in Part I.G.1 and the corresponding concentration in the underlying groundwater.

- 11. The WRSF shall not exceed a height of 110 feet above the HDPE liner surface.
- 12. QA/QC documentation shall be submitted and approved by the Division prior to each lift of the WRSF Phase 9 expansion.
- 13. The WRSF lower sump shall be pumped dry function as pumpback instead of "monitoring point".

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

- H. The facility shall maintain an automated or manual calibrated rain and snow gauge(s), which shall be monitored at least daily to record precipitation (inches of water, including snow water equivalent). A written and/or electronic record of precipitation data and any other weather data required in Part I.D, shall be maintained on site and shall be submitted to the Division upon request, with each Permit renewal application, and pursuant to Parts II.B.1 and II.B.2, as applicable, in a Division-approved electronic format.
- I. The Permittee shall inspect all control devices, systems, and facilities weekly, and during (when possible) and after major storm events. These inspections are performed to detect evidence of:
  - 1. Deterioration, malfunction, or improper operation of control or monitoring systems;
  - 2. Sudden changes in the data from any monitoring device;
  - 3. The presence of liquids in leak detection systems; and
  - 4. Severe erosion or other signs of deterioration in dikes, diversions, closure covers, or other containment devices.
- J. Prior to initiating permanent closure activities at the facility, or at any process component or other source within the facility, the Permittee shall submit and obtain approval from the Division, in writing, of a final plan for permanent closure.
- 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.
- M. When performing dust suppression activities, the Permittee shall use best management practices and appropriate selection of water source and additives to prevent degradation of waters of the State. If a dust suppressant exceeds a water quality standard and the corresponding natural background water concentration in the area where dust suppression will occur, the Permittee shall demonstrate no potential to degrade waters of the State.

## N. Continuing Investigations:

- 1. The Permittee shall submit to the Division for review and approval an updated groundwater flow model, pit lake study with any application to renew or modify the Permit that could affect the pit lake predictive model. The submittal shall also include an ecological risk assessment if the predictive pit lake model indicates the potential for exceedance of a Division Profile III reference value, unless the constituent concentration for each predicted Profile III exceedance is no greater than the concentration evaluated in a previous Division-approved ecological risk assessment for These studies and assessments shall address, at a minimum, the requirements of NAC 445A.429, and shall include all available data, alternative pit lake or backfill scenarios, and mitigations to reduce ecological risk and the potential to degrade groundwater, as applicable. Approval may require modification of the Permit and payment of modification fees. If the Permittee determines that renewal of the Permit will not affect the groundwater flow model and pit lake study, in lieu of an updated model, the Permittee may submit to the Division for review and approval of the existing Division-approved groundwater flow model and pit lake study. The evaluation shall consider modeling methodology, current conditions, changes to site operations and physical conditions, and monitoring results since model approval. The determination shall compare modeled predictive vs. observed conditions whenever possible.
- 2. The Permittee shall submit to the Division for review and approval an updated waste rock management plan (WRMP) with any application to renew or modify the Permit that could affect the WRMP. A revised WRMP must also be approved prior to initiating mining or backfill activities not previously approved. The WRMP must include representative characterization data for all anticipated waste rock and overburden in accordance with the current version of the Division guidance document "Waste Rock, Overburden, and Ore Evaluation," in addition to a detailed description of how, when, and where the materials will be managed and monitored, and appropriate controls to eliminate any potential to degrade waters of the State, if applicable. Approval may require modification of the Permit and payment of modification fees. If the Permittee determines that renewal of the Permit will not affect the WRMP, in lieu of an updated WRMP, the Permittee may submit to the Division for review and approval an evaluation and determination of the continued suitability and adequacy of the existing Division approved WRMP. The evaluation shall consider current conditions, changes to site operations and physical conditions, and monitoring results since WRMP approval.

## 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 or she 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, and 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 or she 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, in a Division-approved electronic format, which are due to the Division on or before the 28<sup>th</sup> day of the month following the quarter and must contain the following:
  - a. Monitoring results from the locations identified in Parts I.D.2, I.D.3, and I.D.4;
  - b. Analytical results of the solution collected from monitoring locations identified in Parts I.D.2, I.D.3, I.D.4, I.D.6, and I.D.9, reported on NDEP Form 0190 or equivalent;
  - c. Water and collar elevations for site monitoring wells identified in Part I.D.6;
  - d. Analytical results of the MWMP-Profile I and Uranium, and NMSP testing for the materials identified in Part I.D.5, reported on NDEP Form 0190 and NDEP Form 0620 as appropriate, or equivalent;
  - e. Tonnages of materials identified in Part I.D.5;
  - f. Tonnage removed from the location and analytical results of TPH testing for the material identified in Part I.D.7;
  - g. A record of releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent; and
  - h. Tonnages of ore shipped and stockpiled as identified in Part I.D.8. Include the names of all permitted Nevada processing facilities or out-of-state processing facilities, as appropriate, that materials were shipped.

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, in a Division-approved electronic format, by February 28<sup>th</sup> of each year, for the preceding calendar year, which contains the following:
  - a. Submit the following items to the Regulation Branch:
    - i. Analytical results for the water quality sample collected from the water supply well identified in Part I.D.1, reported on NDEP Form 0190 or equivalent;
    - ii. Analytical results of the MWMP-Profile I and Uranium, and NMSP testing for the materials identified in Part I.D.7, reported on NDEP Form 0190 and NDEP Form 0620 as applicable, or equivalent;
    - iii. A synopsis of releases on NDEP Form 0390 or equivalent;
    - iv. A brief summary of site operations during the year, including the total number of tons of waste rock and neutralizing material placed within the WRSF, the total number of tons of ore collected, the total number of tons of ore shipped off-site, construction and expansion activities, and major problems with the fluid management system;
    - v. A table of total monthly precipitation amounts and other weather data, as applicable, recorded in accordance with Part I.H, reported for either a five-year history previous to the date of submittal or the history since initial Permit issuance, whichever is shorter. An updated version of the facility monitoring and sampling procedures and protocols as applicable;
    - vi. An updated evaluation of the closure plans using specific characterization data for each process component with respect to achieving stabilization; and
    - vii. Graphs of leak detection flow rates, Underground Discharge (UD), Discharge to Utility Tank (RW), and Discharge to Recycled Water Pond (RW) flow rates, pH, total dissolved solids (TDS), sulfate, chloride, nitrate + nitrite (as N), manganese, iron, antimony, and arsenic 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 parameters may be required by the Division if deemed necessary.
  - b. Submit the following items to the Closure Branch:
    - i. An updated Tentative Plan for Permanent Closure (TTPC) and Final Plan for Permanent Closure (FPPC), as applicable, incorporating any new site information that may impact these plans. The Plans shall be prepared in accordance with the current version of the Division guidance documents "Tentative Plans for Permanent Closure Guidance" and "Preparation Requirements & Guidelines Permanent Closure Plans & Final Closure Reports," as applicable.
- 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.

- 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, and a written report shall be provided within 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 (CFR) 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 5:00 P.M. of the first working day after knowledge of the release. The release shall be reported through the online reporting system available at <a href="http://www.ndep.nv.gov">http://www.ndep.nv.gov</a> or an oral report shall be made by telephone to (888) 331-6337. A written report shall be provided within 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 3 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 3 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, including any exceedances or deviations from Part I.G.
  - a. Each such event shall be reported orally by telephone to (775) 687-9400, not later than 5:00 P.M. 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;
    - 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 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;
  - 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.

### C. Administrative Requirements

1. A valid Permit must be maintained until permanent closure and post-closure monitoring are complete. Therefore, unless permanent closure and post-closure monitoring have been completed and termination of the Permit has been approved in writing by the Division, the Permittee shall apply for Permit renewal not later than 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 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. All reports required by this Permit, including, but not limited to, monitoring reports, corrective action reports, and as-built reports, as applicable, and all applications for Permit modifications, shall be submitted in both hard copy and a Division-approved electronic format.
- 5. The Permittee shall submit any new or updated Universal Transverse Mercator (UTM) location data for all monitoring points specified in Part I.D, expressed in meters and decimals of a meter, using the Nevada Coordinate System of 1983 (also known as the North American Datum of 1983 or NAD83, ref NRS 327.005), with each Permit renewal, as-built report, and monitoring plan update, as applicable. Data shall be submitted electronically to the Division in Excel format.
- 6. 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.
- 7. The Permittee shall maintain a copy of, and all modifications to, the current Permit at the permitted facilities at all times.
- 8. 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 or data logger 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.
- 9. 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.
- 10. 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 Authority

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

- 1. Enter the premises of the Permittee 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 and photograph 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 or approved by the State of Nevada, as applicable for the method(s) being performed. The Permittee must identify in all required reports the certified and approved laboratories used to perform the analyses, laboratory reference numbers, and sample dates, and for the electronic version of each report only, include all associated laboratory analytical reports, including test results, test methods, chain-of-custody forms, and quality assurance/quality control documentation.
- 6. The accuracy of analytical results, unless otherwise specified, shall be expressed in mg/L and be reliable to at least two significant digits. The analytical methods used must have a practical quantitation limit (PQL) equal to or less than one-half the reference value for Profile I parameters. Laboratories shall report the lowest reasonable PQL based on in-house method detection limit studies. Samples shall be analyzed by methods listed in 40 CFR Part 136 Table 1B, as applicable, by a laboratory Certification Program. Samples for Profile I metals shall be filtered, digested, and analyzed for the dissolved fraction, all other Profile I parameters and samples requiring uranium analysis shall be unfiltered, digested (as applicable) and analyzed for the total recoverable fraction, all other Profile III parameters analysis shall be unfiltered digested (as applicable) and analyzed for the total recoverable

fraction; samples requiring Uranium and Profile R analysis shall be unfiltered, digested (as applicable) and analyzed. For additional guidance, please see the Profile Analytical Lists on the website of the Division: <a href="https://ndep.nv.gov/land/mining">https://ndep.nv.gov/land/mining</a>. Unless otherwise approved by the Division, analytical results that are less than the PQL shall be reported quantitatively by listing the PQL value preceded by the "<" symbol.

# F. Permit Modification Requirements

- 1. Any material modification, as defined at NAC 445A.365, plan to construct a new process component, or proposed change to Permit requirements must be reported to the Division by submittal of an application for a Permit modification, or if such changes are in conformance with the existing Permit, by submittal of a written notice of the changes. The Permit modification application must comply with NAC 445A.391 through 445A.399, 445A.410, 445A.414, 445A.4155, 445A.416, 445A.417, 445A.440, and 445A.442, as applicable. The construction or modification shall not commence, nor shall a change to the Permit be effective, until written Division approval is obtained.
- 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 a previously submitted application or report, 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 and areas 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 shall notify the Division in writing at least 30 days before the introduction of process solution into a new process component or into an existing process component that has been materially modified, or of the intent to commence active operation of that process component. Before introducing process solution or commencing active operation, the Permittee shall obtain written authorization from the Division.
- 4. The Permittee must obtain a written determination from the Administrator of any planned process component construction or material modification, or any proposed change to Permit requirements, as to whether it is considered a Permit modification, and if so, what type.
- 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: Natasha Zittel, P.E. Date: 22 January 2024

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