STATE OF NEVADA

Department of Conservation and Natural Resources
Division of Environmental Protection
Bureau of Mining Regulation and Reclamation

Water Pollution Control Permit

Permittee: **Nevada Gold Mines LLC**
Twin Creeks Mine – North Project
1655 Mountain City Highway
Elko, Nevada 89801

Permit Number: **NEV0086018**
Review Type/Year/Revision: **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 **Twin Creeks Mine – North Project**, in accordance with the limitations, requirements, and other conditions set forth in this Permit. The Permittee is authorized to process up to **21,000,000 tons** of ore per year.

The facility is located on public and private land in Sections 4-9 and 16-18, Township 39 North, Range 43 East (T39N, R43E), and Sections 31 and 32, T40N, R43E, Mount Diablo Baseline and Meridian, approximately 35 miles northeast of Golconda in Humboldt County, 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 21 December 1994, 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 **1 December 2023**, and shall remain in effect until **14 June 2026**, unless modified, suspended, or revoked.

Signed this 15th day of **November 2023**.

Rob Kuczynski, P.E.
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. On or before 180 days from the effective date of this Permit renewal (28 May 2024) the Permittee shall submit for review and possible approval an update of the July 2015 Materials Handling Plan.

C. The fluid management system covered by this Permit consists of the following process components:

1. Leach pads: Snowstorm (phase N-1, N-2), Sonoma (phases N-3 - N-5), Izzenhood/'L-8' (phases S-1, S-2, S-3, S-4/S-5);
2. Synthetic-lined and leak detected S-4/S-5 Solution Transfer Sump with dedicated leak detection LCRS sump and evacuation port;
3. N6 Ore Stockpile Pad including the OSP Event Pond;
4. North Ore Stockpile Pad including the North Pad Event Pond;
5. Barren solution ponds (North and South);
6. Pregnant and intermediate solution ponds;
7. Event ponds (major, minor, N-5, and N-6);
8. Solution recovery tanks;
9. Juniper tailings storage facility cells 1, 2, and 3;
10. Underdrainage collection tank/pond;
11. Tailings reclaim solution pond;
12. Reagent storage facilities;
13. Transfer pipes, ditches, valves, and pumps used in conveyance, control or detection of process fluids between process components;
14. Liner systems, leak detection systems, monitoring devices and secondary containment; and
15. Process recovery buildings (i.e. Juniper and Sage Mills) including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building.

D. Monitoring Requirements:

Identification	**Parameter**	**Frequency**
1. Groundwater Monitoring Wells: GW-1B, GW-2A, GW-4, GW-6A, GW-7, GW-8, GW-9, GW-10, GW-11	Profile I[(1)], and Uranium[(4)], water and collar elevation (ft amsl)	Quarterly
2. Leach Pad Leak Detection Sumps and Ports: (sump net fluid capacity) Izzenhood; S-1 (78 gal), S-2 (78 gal), S-3 (78 gal), S4/S5-1 (dedicated pump), S4/S5-2 (dedicated pump), PS-6 (30 gal) Sonoma; N-3 (78 gal), N-4 (78 gal), N-5 (78 gal), and Mill Flush Pond Sump [MFPS] (1,000 gal)	Average daily accumulation (gpd)	Weekly[(7)]
3. Barren Ponds (North and South) Leak Detection Sumps: (sump net fluid capacity) PS-1 (30 gal), PS-5 (30 gal)	Average daily accumulation (gpd)	Weekly[(7)]
4. Pregnant and Intermediate Ponds and Tank Leak Detection Sumps and Ports: (sump net fluid capacity) PS-2 (30 gal), PS-3 (30 gal), PS-7 (30 gal), PS-8 (30 gal), PS-9 (30 gal), PS-10 (30 gal), PS-11 (30 gal)	Average daily accumulation (gpd)	Weekly[(7)]
5. Reclaim Solution Pond Leak Detection System PS-4 (sump net fluid capacity 30 gal)	Average daily accumulation (gpd)	Weekly[(7)]

Identification	Parameter	Frequency
6. Ore Stockpile Event Ponds: N6 Ore Stockpile Event Pond (N6OSEP) and North Ore Stockpile Event Pond (NOSEP) [16]	Presence of fluid; Profile I[1] and Uranium[4]	Quarterly (when present)
7. Pregnant, Intermediate, Barren, and Tailings Reclaim Solutions (PS, IS, BS, RS)	Profile I [1] and Uranium[4]	Quarterly
8. Mined Materials: Waste Rock (WR); New Leach Pad Ore (LO)	MWMP[8]-Profile I[1], Uranium[4], and NMSP[9][10]; NMSP[9][10]	Quarterly; Quarterly
9. Tailings Solution (TS)	Profile I [1] and Uranium[4]	Quarterly
10. Tailings Impoundment Supernatant Pond Cells 1, 2, 3 (SPC-1, SPC-2, SPC-3)	Supernatant pond extents relative to the liner types	Monthly
11. Tailings Impoundment Piezometers (P1 thru P18)	Hydrostatic head (ft above liner)	Monthly
12. Tailings Impoundment Seepage Collection Emergency Basin, Major Events Pond, and the N-5 Events/Water Pond (P1, P2, P3)	Dates of use	When used
13. Make-up Water Supply (MW)	Profile I[1] and Uranium[4]	Annually
14. S-4/S-5 Solution Transfer Sump Leak Detection S4/S5-LD (net fluid capacity 78 gal)	Average daily accumulation (gpd)	Weekly[7]

Identification	**Parameter**	**Frequency**
15. Off-site Mined Material Processing:		
Individual batch size(s) by source;	Source ID[13],quantity (tons) to be moved on-site, dates;	Prior to arrival on-site;
Composite sample of each batch processed by source ID;	MWMP[8]-Profile I[1], Uranium[4], and NMSP[9][10];	Prior to arrival then quarterly;
Composite sample of tailings liquid fraction prior to discharge into impoundment (TW-O)	Profile I[1] and Uranium[4]	Initially, then quarterly[14]
16. Off-site Concentrates Processing:		
Individual batch size(s) by source;	Source ID[13],quantity (tons) to be moved on-site, dates, process/chemicals used to produce concentrates, any applicable storage/ management required;	Prior to arrival on-site;
Composite sample of each batch processed by source ID;	MWMP[8]-Profile I[1] and Uranium[4];	Prior to arrival then quarterly;
Composite sample of tailings liquid fraction prior to discharge into impoundment (TW-O)	Profile I[1] and Uranium[4]	Initially, then quarterly[14]
17. Tailings Storage Facility Piezometer Conduit and Monitoring Sump (TSF-CMS)	Flow (gpm), Twin Creeks North Profile A[15]	Monthly
18. Vista Pit Stormwater Collection Basin (VP-SCB)	Presence of fluid; Profile I[1] and Uranium[4]	Quarterly (when present)

Identification	**Parameter**	**Frequency**
19. Vista Pit Lake Monitoring		
(VPL)	Presence of Water[17];	Quarterly;
General Monitoring – each pit lake;	Photograph, lake surface elevation (ft amsl), maximum lake depth (ft), lake area (acres);	Monthly;
Water Column Monitoring[18] – each pit lake;	Continuous field temperature (°F)[19] and specific conductance (µS/cm)[19] with depth (ft);	Monthly;
Surface Samples[20] – each pit lake;	Field pH (SU)[19], field Eh (mV)[19];	Monthly;
	Profile III[22];	Quarterly;
Depth Samples[21] – each pit lake that is >25 feet deep or has an outflow to groundwater	Field pH (SU)[19], field Eh (mV)[19], depth below surface (ft);	Monthly;
	Profile I[1] and Uranium[4], depth below surface (ft)	Quarterly
20. Tailings Solution Cutoff Trenches		
(CT-1, CT-2)	Flow (gpm), Twin Creeks North Profile A[15];	Monthly;
	Profile I[1] and Uranium[4]	Quarterly
21. French Drain at underdrainage collection pond		
(RW-1)	Flow (gpm), Twin Creeks North Profile A[15];	Monthly;
	Profile I[1] and Uranium[4]	Quarterly
22. Seepage collection well		
(SCW-1)	Flow (gpm), Twin Creeks North Profile A[15];	Monthly;
	Profile I[1] and Uranium[4]	Quarterly

Identification	**Parameter**	**Frequency**
23. Weather Station Facility Ambient Conditions	Ambient temperature, (min/max), relative humidity (%), wind speed (mph), wind direction (azimuth degree), total precipitation (inches), solar irradiance (W/m^2), and SWE (inches)	Daily
24. Waste Rock Storage Facilities[12] OISA J, OISA K, and OISA N	Physical stability, presence of water[23];	Semi-Annually (Q2 and Q4);
Each seep that is flowing	Profile I[1] and Uranium[4], photograph, field pH (SU), field specific conductance (µS/cm)	Semi-Annually, when flowing (Q2 and Q4)
25. PCS Hazardous Waste Determinations Each PCS source	Hazardous waste determination[24]	When required[24]
26. PCS Shipped Offsite	PCS volume shipped offsite (cubic yards)	Quarterly, when removed

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:

gal = gallons; gpm = gallons per minute; gpd = gallons per day; ft = feet; ft amsl = feet above mean sea level; pH = the negative of the base 10 logarithm of the activity of the hydrogen ion; SU = standard units for pH measurement; °F = degrees Fahrenheit; mV = millivolts; µS/cm = microSiemens per centimeter; MWMP = Meteoric Water Mobility Procedure; ANP/AGP = Acid Neutralizing Potential:Acid Generation Potential; N = nitrogen; mg/L = milligrams per liter; $CaCO_3$ = calcium carbonate; µS/cm = microSiemens per centimeter; WAD = weak acid dissociable; min/max = minimum and maximum; % = percent; W/m^2 = watts per square meter; SWE = snow water equivalent; Eh = chemical reduction potential; epilimnion = the uppermost layer in a stratified lake; metalimnion = a middle layer in a thermally stratified lake characterized by a temperature decrease with depth; hypolimnion = a lower layer in a thermally stratified lake below the metalimnion; monimolimnion = the lower layer in a chemically stratified lake that does not mix with

other layers; stratified = a pit lake that has distinct chemical and/or temperature layers; ln = natural logarithm with base e; e = the base of the natural logarithm with approximate value of 2.718; * = multiplication symbol; > = greater than; ≥ = greater than or equal to; < = less than; ID = identification; NDEP = Nevada Division of Environmental Protection; NAC = Nevada Administrative Code; ASTM = American Society for Testing and Materials; Q = calendar quarter of the year

Footnotes:

(1) Profile I:

General Chemistry Parameters		
Acidity(2)	Chloride	pH (± 0.1 SU)
Alkalinity (as $CaCO_3$)	Fluoride	Sulfate
Bicarbonate(3)	Nitrate + Nitrite (as N)	Total Dissolved Solids
Total(3)	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 $CaCO_3$ 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 ≥ 0.030 mg/L, analysis for the Profile I(1), Uranium, and Profile R(5) 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

*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 one of the following appropriate methods, EPA 00-02, EPA 900.0.

If the reported gross alpha activity minus the uncertainty is **less than 15 pCi/L**, reanalysis of the sample by the other appropriate method is required (e.g., 16 ± 21 pCi/L analyzed using method EPA 00-02 would require reanalysis using EPA 900.0).

If the reported gross alpha activity is **greater than or equal to 15 pCi/L**, reanalysis of the sample by the other appropriate method is not required e.g., 36 ± 21 pCi/L would not require reanalysis). See Profile R analyte list on the Division's website for additional information.

(7) Sumps 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 Nevada-approved 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 Nevada-approved 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[9] 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[11] 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) preferably 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[(2)] and Profile III[(22)] analysis shall be unfiltered, digested (as applicable) and analyzed for 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[(1)], Uranium[(2)], and Profile III[(22)] 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[(9)], a Profile I[(1)], Uranium[(2)], and Profile III[(22)] 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.

(12) The management of waste rock shall be performed in accordance with the July 2015 Materials Handling Plan and its subsequent amendments.

(13) Source ID to include site of origin as well as a unique name if more than one material type will be taken from that site.

(14) If multiple off-site ores/concentrates are blended during processing, identify all in the report of the sample analysis.

(15) Twin Creeks North Profile A:

Chloride	Nitrate + Nitrite (as N)	Sulfate	Total Dissolved Solids	WAD Cyanide

(16) Fluid accumulating in the two N6 Ore Stockpile Event Ponds shall be sampled and analyzed anytime there is the presence of fluid in the single lined pond. If the results of the analyses demonstrate exceedances in Profile I[(1)] reference values, then the accumulated solution shall be evacuated and properly disposed within 20 days of any single event.

(17) For presence of water, state whether the pit surface is dry, damp, or wet (ponded or flowing water). If ponded water has been present for at least one year, the Permittee shall perform the required monitoring for pit lakes.

(18) A continuous temperature-conductivity profile shall be completed for the entire water column at the deepest location in each pit lake.

(19) Field measurements (e.g., temperature, specific conductance, pH, Eh, etc.) shall be made at the Project site concurrent with the monitoring activity using a calibrated instrument, and do not require analysis by a laboratory certified or approved by the State of Nevada as otherwise specified in Part II.E.5. Field measurements must be accompanied by appropriate calibration information.

(20) The surface samples must be collected less than 10 feet below the surface of the pit lake.

(21) Depth sampling shall be performed at the deepest location in each pit lake. The number and depth of samples shall be determined based on the temperature-conductivity profile of the water column at the time of sampling. If the lake is stratified, collect a separate depth sample from each distinct layer in the water column (e.g., from the epilimnion, metalimnion, hypolimnion, and monimolimnion, as applicable; however, note that the quarterly sample from the surface layer [epilimnion] must be analyzed for Profile III[22] constituents per the surface sample requirements whereas the quarterly depth samples from all other layers are analyzed for Profile I[1] constituents). If the lake is unstratified and between 25 and 50 feet deep, collect one depth sample from the lower half of the water column. If the lake is unstratified and greater than 50 feet deep, collect two depth samples consisting of an intermediate sample from the middle third of the water column and a deep sample from the lower third of the water column. If the lake is less than 25 feet deep but includes an outflow to groundwater (i.e., it is a hydrologic flow-through pit lake), collect a quarterly Profile I[1] surface sample in addition to the quarterly Profile III[22] surface sample.

(22) Profile III:

General Chemistry Parameters		
Acidity[2]	Fluoride	Sulfate
Alkalinity (as $CaCO_3$)	Nitrate + Nitrite (as N)	Total Dissolved Solids
Bicarbonate[3]	Nitrogen, Total (as N)	Total Suspended Solids
Total[3]	pH (± 0.1 SU)[2]	--
Chloride	Phosphorus	--
Metals Totals		
Aluminum	Copper	Potassium
Antimony	Iron	Selenium
Arsenic	Lead	Sodium
Barium	Lithium	Strontium
Beryllium	Magnesium	Thallium
Boron	Manganese	Tin
Cadmium	Mercury	Uranium
Calcium	Molybdenum	Vanadium
Chromium	Nickel	Zinc

(23) Provide a visual evaluation of each waste rock storage facility for presence of water and seepage. If visibly unstable, or slope failure, describe. For presence of water, identify whether the surface and toes of the waste rock storage facility are dry, damp, or wet

(ponded or flowing water). If seepage is emanating from any portion of a waste rock storage facility, the Permittee shall perform the required monitoring for seeps.

(24) A hazardous waste determination is required: a) Initially, for each PCS source prior to management under the PCS Management Plan; b) When a PCS waste stream is suspected to have changed character since the last determination; and c) When a hazardous constituent is detected during screening analyses at a concentration suggestive of hazardous waste. Determinations must be performed pursuant to 40 Code of Federal Regulations (CFR) 262.11 using operator knowledge and/or applicable analytical testing methods described in EPA publication SW-846. Operator knowledge must be adequately described and sufficient to justify the determination.

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. The daily accumulation, averaged over the quarter, from any one leach pad leak detection sump identified in Part I.D.2 exceeding 75 gallons per day.
2. The daily accumulation, averaged over the year, from any one leach pad leak detection sump identified in Part I.D.2 exceeding 25 gallons per day.
3. The daily accumulation, averaged over the quarter, from any one pond or tank leak detection system identified in Parts I.D.3, I.D.4, I.D.5, and I.D.14, exceeding 150 gallons per day.
4. The daily accumulation, averaged over the year, from any one pond or tank leak detection system identified in Parts I.D.3, I.D.4, I.D.5, and Part I.D.14, exceeding 50 gallons per day.
5. Failure to meet a Schedule of Compliance date.
6. All analytical samples shall be analyzed as mentioned in the Footnotes or Section II.E, as applicable.
7. The storage of process solution in a single-lined pond for more than 20 consecutive days for any single event.
8. Heap heights on the Snowstorm leach pad shall not exceed 200 ft as measured vertically from any point on the surface of the synthetic liner.
9. Heap height on the Sonoma leach pad shall not exceed 200 ft as measured vertically from any point on the surface of the synthetic liner.
10. Heap height on the Izzenhood leach pad shall not exceed 200 ft (Pads S-1, S-2 and S-3) or 300 ft (Pad S-4/S-5) as measured vertically from any point on the surface of the synthetic liner.
11. Height of the N6 Ore Stockpile and the North Ore Stockpile shall not exceed 200 ft as measured vertically from any point on the surface of the low permeability soil layer.

12. The cumulative solution application rate to the Snowstorm, Sonoma, and Izzenhood leach pads shall not exceed the permitted 6,000 gpm each.

13. The average solution application rate *per unit area* on any leach pad should not exceed 0.005 gallons per minute per square foot (gpm/ft^2) and care shall be taken to prevent excessive ponding or runoff.

14. A minimum 2-foot design freeboard shall be maintained in all operating ponds during and after the 25-year, 24-hour storm event.

15. In accordance with the approved design, the tie-in between any existing PVC liner and the new Phase S-4 and S-5 heap leach pad expansion, must include regrading of the existing heap leach slope to no more than 2 horizontal to 1 vertical (2H:1V), the HDPE overlapping liner must extend a minimum 50 ft vertically onto the existing heap leach pad to the anchor trench, and the overlapping HDPE liner surface must be constructed with a minimum slope of 2 percent to drain toward the new phase.

16. Processing off-site mined material from a new source, including other facilities owned or operated by Permittee, not previously approved by the Division, requires submittal of a source identification, material characterization, and proposed tonnage, in accordance with Parts I.D.15 and I.D.16, for review and approval by the Division prior to delivery to the site. All off-site material must be placed within the mill crusher stockpile or other approved containment, in volumes that do not exceed the design limits of that containment, at all times prior to processing.

17. Waste rock management shall be in accordance with the latest approved revision of the Material Handling Plan.

18. The facility shall not degrade waters of the State to the extent that applicable water quality standards, and background concentrations, are exceeded.

19. Prior to initiation of construction of any future permitted stages of the Juniper Tailings Storage Facility, the Permittee shall obtain written authorization from the Division.

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

H. The facility shall maintain 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.23, 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 systems 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 dispose of or treat Petroleum-Contaminated Soil (PCS) generated at the facility in accordance with the PCS Management Plan approved for the Twin Creeks South Project Permit No. NEV0089035. The approved PCS Management Plan and the Division Guidance for Mine-Site PCS Management Plans are hereby incorporated into this Permit by reference.

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 and pit lake study and ecological risk assessment (as appropriate) with each Permit renewal and with any application to modify the Permit that could affect the pit lake predictive model. The study and assessment 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, 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 an evaluation and determination of the continued suitability and adequacy of the existing Division-approved groundwater flow model and pit lake study. The next revision and all future revisions of the pit lake model shall incorporate a sensitivity analysis on blast-induced fracture depth appropriate for the Vista Pit Phase VIII wall rock. In the next revision and all future revisions of the pit lake model, the base case for next pit lake study revision shall not include the effect of moisture limits to the oxidation model. However, a sensitivity analysis to evaluate the effect of varying the moisture effect in a semi-arid environment shall be included. The next revision and all future revisions of the pit lake model shall include a plot for each chemical parameter showing the derived chemical release function (CRF) curve and all humidity cell test (HCT) data obtained for that parameter. The next revision and all future revisions of the pit lake study shall clearly illustrate the three dimensional boundaries in the model between the pit lake inflow and

outflow zones, as they vary in time through the pit filling process. In addition, the revised pit lake study shall clarify whether the flow direction and magnitude at any given time is discretized on a small scale or represented in a few large zones. 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 each Permit renewal and with any application to modify the Permit that could affect the WRMP. A revised WRMP must also be approved prior to initiating mining or in-pit 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. 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. Approval may require modification of the Permit and payment of modification fees.

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 28th day of the month following the quarter and must contain the following:

   a. Monitoring results from the leak detection systems identified in Parts I.D.2, I.D.3, I.D.4, I.D.5, and I.D.14, reported on NDEP Form 0590 or equivalent;

   b. Analytical results of the solution collected from monitoring locations identified in Parts I.D.1, I.D.6, I.D.7, I.D.9, I.D.18, I.D.19, I.D.20, I.D.21, and I.D.22 reported on NDEP Form 0190/0290 (as appropriate) or equivalent;

   c. Depth to water and water elevations for site monitoring wells identified in Part I.D.1;

   d. Analytical results of the MWMP-Profile I and/or ANP/AGP testing for the materials identified in Part I.D.8, reported on NDEP Form 0190 or equivalent;

   e. Analytical results for the Vista Pit Lake identified in Part I.D.19, reported on NDEP Form 0290 and NDEP Form 0190 or equivalent, as applicable;

   f. Other monitoring results for the Vista Pit Lake identified in Part I.D.19;

   g. A record of releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent;

   h. A report as to whether or not processing of off-site mined material occurred during the quarter and, if so, total tons and all data and analytical results for the source IDs identified in Part I.D.15;

   i. A report as to whether or not processing of off-site concentrates occurred during the quarter and, if so, total tons and all data and analytical results for the source IDs identified in Part I.D.16;

   j. Monitoring results and analytical results for the tailings piezometer conduit sump identified in Part I.D.17;

   k. Other monitoring results for the tailings impoundment identified in Parts I.D.10, I.D.11, and I.D.12;

   l. For any kinetic test initiated, continued, or terminated with Division approval, during the quarter in accordance with Part I.D, 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;

   m. A summary of all monitoring locations which had uranium greater than or equal to 0.03 mg/L with the planned next step of sampling per Footnote (4);

   n. Analytical results, copies of hazardous waste determinations, and monitoring results, identified in Parts I.D.25 through I.D.26, pertaining to the approved PCS Management Plan; and

   o. An updated list of all PCS sources managed under the approved PCS Management Plan, with any new or changed sources highlighted, reported on NDEP Form PCS-01 or equivalent; current screening levels for each on-site disposal location; and a detailed explanation of any revisions to screening levels.

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 28th of each year, for the preceding calendar year, which contains the following:

   a. Submit the following items to the Regulation Branch:

      i. Analytical results of make-up water supply identified in Part I.D.13 reported on NDEP Form 0190 or equivalent;

      ii. A synopsis of releases on NDEP Form 0390 or equivalent;

      iii. A brief summary of site operations, including the number of tons of ore milled or placed on heaps during the year, number of tons and description of material processed from each off-site facility, construction and expansion activities, and major problems with the fluid management system;

      iv. A table of total monthly precipitation amounts and other weather data, as applicable, recorded in accordance with Parts I.D.23 and I.H, reported for a five-year history previous to the date of submittal;

      v. An updated version of the facility monitoring and sampling procedures and protocols, as applicable;

      vi. Provide any changes to monitoring locations in the past year as mentioned in Part II.C.5.

      vii. Graphs of leak detection flow rates, pH, total dissolved solids (TDS), sulfate, chloride, nitrate + nitrite (as N), WAD cyanide, fluoride, zinc, 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; and

      viii. Juniper Tailings Storage Facility seepage collection annual remediation report including a summary of remedial actions taken, results of monitoring data obtained for Parts I.D.17, I.D.20, I.D.21, and I.D.22 as well as monitoring wells GW-8, GW-10 and GW-11, an evaluation of remedial performance, and a proposed work plan and schedule for any appropriate additional actions.

   b. Submit the following items to the Closure Branch:

      i. An updated Tentative Plan for Permanent Closure (TPPC) 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.

ii. An updated evaluation of the closure plans, as applicable, using specific characterization data for each process component with respect to achieving stabilization;

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 http://www.ndep.nv.gov 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 workday 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; 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.

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 and Profile III 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 certified for that method by the State of Nevada – Bureau of Safe Drinking Water 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; samples for Profile III metals shall be unfiltered, digested, 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: https://ndep.nv.gov/land/mining. 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: 14 November 2023

Revision 00: Renewal 2023 with Boiler Plate Updated