#### STATE OF NEVADA

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

#### Water Pollution Control Permit

Permittee:

Florida Canyon Mining, Inc. Florida Canyon Mine P.O. Box 330 Imlay, NV 89418

Permit Number: NEV0086001 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 **Florida Canyon Mine**, in accordance with the limitations, requirements, and other conditions set forth in this Permit. The Permittee is authorized to process up to **18,000,000 tons** of ore per year.

The facility is located on public and private land in Pershing County in Sections 1 through 4, 9 through 15, 33, 37, 38, and 39, Township 31 North (T31N), Range 33 East (R33E); Section 35, T33<sup>1</sup>/<sub>2</sub>N, R33E; and Sections 33, 34, and 35, T32N, R33E; Mount Diablo Baseline and Meridian, approximately 7 miles southwest of the town of Imlay.

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 30 December 1993, 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 24 March 2023, and shall remain in effect until 12 August 2026, unless modified, suspended, or revoked.

Day of March 2023. Signed this

Robert Kuczynski (P.K.) 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. Upon closure of the Barren Pond, when cessation of operation allows for removal of the piping and other infrastructure presently blocking access to the existing liner anchor trench, and prior to conversion of the pond to an evapotranspiration cell, the Permittee shall submit to the Division an application for Permit modification proposing replacement of the primary liner using a conventional anchor trench design. The secondary liner, welded to the existing, anchored liner, may remain after testing of the weld, according to a procedure approved by the Division, confirms that it is sound over the entire length. Permit modification fees shall apply.
    - 2. By 01 July 2020, the Permittee shall submit for review and approval a revised design for the Florida Canyon and Wiley Gulch stormwater management structures. This design must incorporate pit boundary limits, topography, and any other mine activates (as reasonably predictable) to ensure that the management structure will not limit future mining activities. EDC submitted on 01 July 2020. Division comments sent 13 January 2021. Responses have not yet been received as of the 2022 renewal.
    - 3. By **Day Month 2023** (90-days after the effective date of the Permit) the Permittee shall submit, for review and approval, an updated Final Plan for Permanent Closure of the North Heap Leach Pad. The plan, along with including construction drawings, technical specifications, and quality assurance/quality control procedures, shall include a proposed schedule for implementation.

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

- C. The fluid management system covered by this Permit consists of the following process components:
  - Lined Heap Leach facilities, including the 238-acre circular heap leach pad, 75-acre semi-circular heap leach pad, 91-acre semi-circular North heap leach pad, 34-acre Northeast Expansion heap leach pad,103-acre South Heap Leach Pad (SHLP) Phase 1-, and 104-acre SHLP Phase 2, respective solution collection and conveyance ditches, and associated leak detection systems;
  - 2. Reagent tanks including cyanide tanks and their secondary containment;
  - 3. Carbon Columns A, B, C, D, E and their secondary containment;

- 4. Solution ponds, including the Pregnant (PS-1), Barren (BS-1), Contingency (CP-1 & CP-2), Utility (S2), and Expansion Ponds (S3), and South Area Expansion Barren (SBP-1), Pregnant (SPP-1), and Contingency (SCP-1) Ponds and their corresponding liners and leak detection systems;
- 5. Test Evaporation Cell with dual syntenic liners, leak detection, backfilled material, and solution distribution box and piping;
- 6. Transfer pipes, valves, wells and pumps used in conveyance, control, detection, or monitoring of process fluids between process components;
- 7. Process recovery building and its secondary containment including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building; and
- 8. Groundwater Remediation System, including all associated pumpback and monitoring wells.

Identification	<u>1</u>	<u>Parameter</u>	Frequency
1. <u>Make-up '</u> <u>Cooling P</u> MWS	Water Supply at ond:	Profile $I^{(1)}$ and uranium <sup>(4)</sup>	Annually (Q2)
Wells: MW-B, -C -S, -T, -U, -13, -15, -	nter Monitoring C, -H, -L, -P, -Q, -R, MW-7, -8, -11, -12, 16C, -17, -28, -30, 34, -35, -36, -37, 9(13)	Profile I <sup>(1)</sup> and uranium <sup>(4)</sup> , and water and collar elevation (feet AMSL);	Quarterly;
MW-12, -	13, -34, - 36	Profile I <sup>(1)</sup> and uranium <sup>(4)</sup> , and water and collar elevation (feet AMSL);	Annually
MW-F, -C	}	Water and collar elevation (feet AMSL)	Quarterly

#### D. Monitoring Requirements

Identification		<u>Parameter</u>	Frequency
3.	Leach Pad Leak Collection Out-Fall Pipes and Channel Leak Detection Outfalls: North Heap Leach Pad LP1-3, LP5-25 <sup>(15)</sup> , LP26-29 (34-Acre Pad Sump)	Average daily flow (gpd)	Quarterly average of weekly measurements <sup>(7)</sup>
	South Heap Leach Pad Phase I L1, L2, L3, L4		
	South Heap Leach Pad Phase II L5, L6, L7, L8		
	South Conveyance Channel 1 A (SCC-1A)	5	
	South Conveyance Channel 1 B (SCC-1B) <sup>(14)</sup>	Flow/no flow	Weekly
4.	Contingency, Utility, and Process Pond Leak Detection Sumps and Conveyance Channel Outfalls: CP1 [net capacity 1,233 gal], CP2 [net capacity 1,233 gal], BS1 [net capacity 771] UP (S2) [net capacity 771 gal], EP (S3) [net capacity 1,233 gal], SCP-1 [net capacity 2,700 gal], SPP-1 [net capacity 2,700 gal], SBP-1 [net capacity 2,700 gal], SBP-1 [net capacity 7 gal] <sup>(8)</sup> ;	Average daily accumulation (gpd)	Weekly <sup>(1)</sup>
5.	Pregnant and Barren Leach Solutions and South Pregnant and South Barren Leach Solutions: Process Solution 1 (PS1) <sup>(15)</sup> Barren Solution 1 (BS1) South Pregnant Solution (SPS) South Barren Solution (SBS)	Profile I <sup>(1)</sup> and uranium <sup>(4)</sup>	Semi-annually (1 <sup>st</sup> and 3 <sup>rd</sup> quarter)

Identification		<u>Parameter</u>	Frequency
6.	Mined Materials: Waste Rock (WR);	NMSP <sup>(9)</sup> and MWMP <sup>(8)</sup> - Profile I <sup>(1)</sup> and uranium <sup>(4)</sup> ;	Quarterly;
	Leach Pad Ore (LO)	NMSP <sup>(9)</sup>	Quarterly
7.	Pumpback System Wells: MW-C, GA, -I, -K, -KA, -M, - N, -O, -P -V, MW-29, -31, -16, -16B, -16D	Profile I <sup>(1)</sup> and uranium <sup>(4)</sup> , volume pumped (gal) and destination, depth to water (feet) and water and collar elevation (feet amsl);	Quarterly;
8.	Process Building leak detection Sump Leak Detection: Tank Farm Sump (TFS), West Sump (WS), Acid Tank Sump (ATS), East Sump (ES), Met Lab Sump (MLS), A-Plant Sump (APS), East Wall Sump (EWS), Retort Sump (RS), EW-Cell Sump (EWCS)	Presence of fluid; Average daily accumulation (gpd)	Daily; Weekly
9.	<u>Phase 7 Pit:</u> Pit Floor Elevation;	Measured (feet AMSL);	Quarterly
	Height of Pit Floor Above Water Table	Water Table reported as elevation of well MW-37 measured (feet) below Pit Floor;	
10	. <u>Waste Rock Storage Facilities</u> All WRSF's;	Physical stability, presence of water <sup>(14)</sup> ;	Semi-Annually (Q2 and Q4);
	Each seep that is flowing	Profile I <sup>(1)</sup> and uranium <sup>(4)</sup> , photograph, field pH (SU), field specific conductance ( $\mu$ S/cm)	Semi-Annually, when flowing (Q2 and Q4)

Identification	<b>Parameter</b>	Frequency
11. 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 <sup>2</sup> ), and SWE (inches)	Daily
12. <u>Test Evaporation Cell:</u> S-1 Pond	Profile I <sup>(1)</sup> and uranium <sup>(4)</sup> ; depth of water (feet);	Quarterly, when constructed;
Leak detection sump	Average daily accumulation (gpd)	Weekly <sup>(2)</sup>
13. 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:

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; Eh = chemical reduction potential; EPA = U.S. Environmental Protection Agency; gpd = gallons per day; gpm = gallons per minute; mg/L = milligrams per liter; MGD = million gallons per day; monimolimnion = the lower layer in a chemically stratified lake that does not mix with other layers; mV = millivolts; 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; WAD = weak acid dissociable; < = less than; °F = degrees Fahrenheit;  $\mu$ S/cm = micro-Siemens per centimeter

# Footnotes:

(1) Profile I:

General Chemistry Par	rameters	
Acidity <sup>(2)</sup>	Chloride	pH (± 0.1 SU)
Alkalinity (as CaCO3)	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 CaCO3 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) The 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 <sup>(6)</sup>	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 an appropriate method, e.g., EPA 00-02, EPA 900.0. Additionally, if the reported gross alpha activity is 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.

- (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 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 shows the potential for acid generation 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<sup>(2)</sup> and Profile III<sup>(22)</sup> 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  $I^{(1)}$  and Uranium<sup>(2)</sup> 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  $I^{(1)}$ , Uranium<sup>(2)</sup>, and Profile III<sup>(22)</sup> 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) Provide a visual evaluation of each waste rock storage facility for physical stability (e.g., stable, unstable, or slope failure), 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.
- (13) Monitoring wells will be completed in Q2 of 2023 in response to the Divisions technical comments on the 5-year renewal application. Wells names will be finalized once constructed and record of construction is submitted.
- (14) Leak detection port SCC-1B is currently being investigated to determine if it was constructed. The port, as designed, monitors for leaks below the secondary synthetic liner of the solution conveyance channel, and is not necessary in the event that it was not constructed due to leak detection port SCC-1A monitoring leakage from the primary liner and due to the containment exceeding NAC 445A.434 design criteria.
- (15) Leak detection port LP-25 is not locatable and was likely capped and removed during construction of the 34-acre expansion of the North Heap Leach Pad.
- 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 flow or accumulation exceeding 20 gallons per day averaged over the quarter in any one leak detection system identified in Parts I.D.3, except SCC-1B.
  - 2. The daily flow or accumulation exceeding 10 gallons per day averaged over the year in any one leak detection system identified in Parts I.D.3, except SCC-1B.
  - 3. The daily accumulation of flow exceeding 150 gallons per day averaged over the quarter in any one leak detection sump identified in Parts I.D.3 (SCC-1B), I.D.4, and I.D.8.
  - 4. The daily accumulation of flow exceeding 50 gallons per day averaged over the year in any one leak detection sump identified in Parts I.D.3 (SCC-1B), I.D.4 and I.D.8.

- 5. The storage of process solution in the South Pregnant (SPP-1) and Barren Ponds (SBP-1) in excess of the maximum operational depth of 10-feet for more than 20 consecutive days for any single event.
- 6. Failure to meet a Schedule of Compliance date.
- 7. Heap leach pads, other than SHLPI and SHLPII, as measured vertically from the top of the synthetic liner for any point on the pad, constructed in excess of a maximum permitted elevation of 300 feet over minimum 80-mil thickness high density polyethylene (HDPE) liner. SHLP Phase 1 and 2, as measured vertically from the top of the synthetic liner for any point on the pad, constructed in excess of a maximum permitted elevation of 300 feet over minimum 80-mil thickness HDPE liner.
- 8. The cumulative solution application rate to the heap leach pads, other than SHLPI, by all methods, shall not exceed 9,000 gpm. Additionally, the solution surface application rate *per unit area* shall not exceed 0.005 gpm/ft<sup>2</sup>. The cumulative solution application rate to the SHLP1, by all methods, shall not exceed 5,000 gpm. Additionally, the solution surface application rate *per unit area* shall not exceed 0.004 gpm/ft<sup>2</sup>.
- 9. Pursuant to the February 2015 Finding of Alleged Violation and Order, the extent of process solution or freshwater application shall be no less than 450 feet north of the northern extent of the Stage III separation berm between Stage III HLP expansion and the 1995 HLP expansion. This limit will be surveyed and marked with permanent signs indicating to operators and inspectors the limit, on the ground, at intervals at a maximum distance of 500 feet between each sign and shall be visible from the sign on either side. The South Heap Leach Pad Phase I through III is exempt from this restriction.
- 10. Except as otherwise allowed by this Permit, a minimum 2-foot freeboard shall be maintained in all ponds.
- 11. Phase 7 pit expansion depth shall not exceed a maximum depth of 50 feet above the existing water table or exceed an elevation of 4,485 feet amsl. The water table at the Phase 7 pit area is currently established at an elevation of 4,435 feet amsl.
- 12. The application of cyanide to the northern non-closed portion of the NHLP.
- 13. All analytical samples shall be analyzed as mentioned in the Footnotes or Section II.E, as applicable.

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.11, 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. PCS shall be managed according to the Plan, and regardless of any prior risk assessment approvals, shall not be left in-situ at permanent closure without Division authorization. This applies to any contaminated soil that formed as the result of a release outside of the PCS management pad. For any hydrocarbon releases to be left in-place until final closure, the Permittee shall submit documentation per NAC 445A.227.
- 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 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 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. 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 both hard copy and a Divisionapproved 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:
      - Monitoring results from the leak detection systems identified in Parts I.D.3, I.D.4, I.D.8, and I.D.12 reported on Nevada Division of Environmental Protection (NDEP) Form 0590 or equivalent;
      - b. Analytical results of the solution collected from monitoring locations identified in Parts I.D.2, I.D.5, I.D.7, I.D.10, and I.D.12 (as applicable), reported on NDEP Form 0190 or equivalent;
      - c. Water levels for site monitoring wells identified in Part I.D.2 and pump-back wells identified in Part I.D.7;
      - d. Groundwater remediation summary including gallons pumped and location pumped to for wells identified in Part I.D.7;
      - e. Analytical results of the MWMP-Profile I and ANP/AGP testing for the materials identified in Part I.D.6, reported on NDEP Form 0190 or equivalent;
      - f. For any kinetic test initiated, continued, or terminated with Division approval during the quarter, provide a brief report of the test status and an evaluation of the results to date, which shall include all analytical data generated from the date testing was initiated through the reporting quarter;

- 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. Phase 7 pit floor elevation and pit floor height above the water table as identified in Part I.D.9.
- i. Other required monitoring data for the waste rock dumps identified in Part I.D.10;
- j. Other required monitoring data for the evaporation cell identified in Part I.D.12.
- k. 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);

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 of water quality samples collected from water supply wells identified in Part I.D.1, 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 (as applicable) during the year, 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.11 and 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;
    - 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 either a five-year history previous to the date of submittal or the history since initial Permit issuance, whichever is shorter. 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 (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.
- 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 for in-State callers or (775) 687-9485 for out-of-State callers, 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 exceedance 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; 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 and renewals, 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, Profile III, and Surface Water Profile 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 for Surface Water Profile parameters shall be analyzed in accordance with NAC 445A.1236 and other applicable surface water regulations; 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. (Remove references to Profiles that aren't used in this Permit). Unless otherwise approved by the Division, analytical results that are less than the POL 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 the 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 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: 7 March 2023

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