

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
Boulder Valley Infiltration Project
1655 Mountain City Highway
Elko, NV 89801**

Permit Number: **NEV0089068**
Review Type/Year/Revision: **Renewal 2025, 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 **Boulder Valley Infiltration Project**, a water treatment and management facility, in accordance with the limitations, requirements, and other conditions set forth in this Permit. The Permittee is authorized to discharge to rapid infiltration basins (RIBs) up to **101 million gallons per day (MGD)**.

The facility is located in Eureka County, within Sections 22-24, 27, 30 and 32-34, Township 36 North (T36N), Range 49 East (R49E); Sections 3-5, 7, 8, 17-20, and 29-36, T35N, R49E; Sections 24-26, 35, and 36, T35N, R48E; Sections 1, 2, 11, 14, and 15, T34N, R48E; Sections 4-6, 8, 11, 14-17, 21, 22, and 27, T34N, R49E; Sections 2,3,10, and 11, T35N, R50E; and Sections 29, 30, and 32, T36N, R50E; Mount Diablo Baseline and Meridian, approximately 20 miles northwest and 27 miles north of Carlin, 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 29 May 2002, 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 **DD June 2025**, and shall remain in effect until **9 April 2029**, unless modified, suspended, or revoked.

Signed this _____th day of **June 2025**.

Ashley Taylor, P.E.
Chief, Bureau of Mining Regulation and Reclamation

I. Specific Facility Conditions and Limitations

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

1. Construct, operate, and close the Project in accordance with those design plans;
2. Except for the discharge authorized by this Permit, and any other approved uses, contain within the fluid management system all dewatering water and all meteoric waters that enter the system as a result of the 25-year, 24-hour storm event; and
3. Except for the discharge authorized by this Permit, not release or discharge any contaminants from the fluid management system that would result in degradation of waters of the State.

B. Schedule of Compliance: None

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

1. Dewatering wells and collection pipelines; including Leeville Mine dewatering wells
2. The single-walled 38,000-gallon steel dewatering water Surge Tank;
3. The high-density polyethylene (HDPE) double-lined Surge Tank Pond and associated leakage collection and recovery system (LCRS);
4. Gravity flow pipelines, including the 72-inch diameter pipeline to the TS Ranch Reservoir, the 54-inch diameter pipeline to the irrigation system, delivery pipelines to the injection wells, and the 24-inch diameter pipeline to the RIBs;
5. Ferric sulfate Water Treatment Plant (located at the cooling channel);
6. The Leeville Water Treatment Plant and associated secondary containment systems;
7. Water Treatment Plant (arsenic co-precipitation) located at Pump Station 1;
8. High density polyethylene (HDPE) lined Cooling Channel, 50-inch diameter bypass pipeline, and Settling Pond;
9. Three HDPE double-lined treated water Settling Ponds, LCRSs, and overflow weirs;
10. Four HDPE double-lined Inflow Settling Basins and associated LCRSs;
11. The Settling Pond solids pipeline and lined containment ditch;
12. The treated water Discharge Pipeline system, and associated components used to convey treated dewatering water;
13. TS Ranch Reservoir and Coffey Dam;
14. Sand Dune Canal;
15. Pump Stations P1 and P2;
16. Three Rapid Infiltration Basins (RIBs): Pond 1, Pond 2, Pond 3;

17. A 46-inch diameter Pump-back Pipeline, a 46-inch diameter Recirculation Pipeline, a 54-inch diameter Irrigation Pipeline, and a 36-inch diameter Pipeline to multiple irrigation pivots;
18. The Leeville De-Sedimentation Project Phase I, including Geotubes, HDPE-lined drainage platform and collection channel, Truck Station Tank and pad, and the Leeville Mine Oil/Water Separator System, including the East and West Sedimentation Basins, oil skimmers, Pump Tank, and oil/water separator tank (bypassed in 2012); and
19. All components used to collect, convey, manage, and control the discharge water, including but not limited to, pumps, pipes, valves, vents, flow meters, fittings, tanks, drains, basins, sumps, ditches, berms, culverts, drill rigs, mobile equipment, run-off/run-on structures, and devices for controlling erosion or sedimentation.

D. Monitoring Requirements:

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
1. <u>Feed water</u> (GFPD-2B)	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾ ; and flow rate (MGD)	Quarterly
2. <u>Groundwater monitoring wells</u> Upgradient –NA-22, NA-29 Downgradient –NA-23, NA-26, NA-32, and NA-34	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾ ; and water and collar elevations (ft AMSL)	Quarterly
3. <u>Calibration Wells</u> Antimony attenuation model calibration wells ⁽⁷⁾ : NA-18	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾ ; and water and collar elevations (ft AMSL)	Semi-annually (1 st and 3 rd quarters)
4. <u>Rapid infiltration basins</u> Influent (V3)	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾	Monthly (when in use)
5. <u>Water balance program</u> (WBP)	Per Water Balance Methodology in Operations Plan	Per Water Balance Methodology in Operations Plan
6. Treated water at Boulder Valley Settling Pond Weir ⁽⁸⁾⁽⁹⁾⁽¹⁰⁾ (BVSP)	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾ , TPH ⁽¹⁹⁾	Monthly (when in use)
7. Sand Dune Canal at Pump Stations (P1 and P2)	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾	Quarterly (when in use)

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
8. Outfall from Water Treatment Plant at Pump Station P1 (WTP) ⁽¹¹⁾	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾ ; and flow rate (MGD)	Monthly when in use
9. <u>Springs</u> ⁽¹²⁾ Sand Dune Spring (SD); Knob Spring (K); Green Spring (G)	Profile I ⁽¹⁾ & Uranium ⁽⁴⁾	Semi-annually (1 st and 3 rd quarters)
10. <u>Pond Leak Detection Sumps</u> <u>[capacity]</u> Intermediate Leak Detection Sump [8,750 gal] Surge Tank Overflow Pond (STOPLD) [3,671 gal] Treated Water Settling Pond 1 (TP-1LD) [8,214 gal] Treated Water Settling Pond 2 (TP-2LD) [8,473 gal] Treated Water Settling Pond 3 (TP-3LD) [4,767 gal] Inflow Settling Basins (ISB-1, ISB-2, ISB-3, ISB-4) [30 gal each]	Average daily accumulation (gpd)	Weekly ⁽¹³⁾
11. <u>Dewatering Wells</u> Upper Plate: HDDW-11,-12, and -13 Lower Plate: HDDW-2, -3, -4, -5, -6, -7, -8, -9, -10, -14, -15, -16, -17, -18, and -19	Average monthly pumping rate (gpm) for each well	Monthly
12. <u>Dewatering Water Intake</u> Surge Tank at inlet (STI)	Average daily flow (gpm); Profile I ⁽¹⁾ & Uranium ⁽⁴⁾	Weekly; Monthly
13. <u>Treated Water Settling Pond Solids</u> (TWPS)	Mass (tons) disposed, and identification, location, and type of disposal facility; MWMP ⁽¹⁴⁾ -Profile I ⁽¹⁾ , Uranium ⁽⁴⁾ , NMSP ⁽¹⁵⁾⁽¹⁶⁾ , and TPH ⁽¹⁹⁾ , of composite sample	Quarterly by disposal location; Annually, if in use

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
14. <u>Leeville De-Sedimentation and Underground Mine Sump Oil/Water Separator Systems</u> Water Treatment Plant distribution box discharge (LVOWD); Truck Station Tank discharge (LVTSD); Separator LCRS sump (LVOWLD) [800 gal capacity]; Geotube solids except TWPS (LVUGSS), Sedimentation Basin solids (LVOWS)	Average daily flow (gpm), Profile I⁽¹⁾ and Uranium⁽⁴⁾, TPH⁽¹⁹⁾; Average daily flow (gpd); Average daily accumulation (gpd); Mass (tons) removed, and identification, location, and type of receiving facility, MWMP⁽¹⁴⁾-Profile I⁽¹⁾ and Uranium⁽⁴⁾ and NMSP⁽¹⁵⁾⁽¹⁶⁾; TPH⁽¹⁹⁾, of composite sample	Weekly, Monthly; Weekly; Weekly⁽¹³⁾; Monthly by receiving location, Quarterly
15. <u>Weather Station Facility Ambient Conditions</u>	Ambient temperature, (min/max), relative humidity (%), wind speed (mph), wind direction (azimuth degree), total precipitation (inches), solar irradiance (W/m²), and SWE (inches)	Daily

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; gal = gallons; gpd = gallons per day; MGD = million gallons per day; ft = feet; pH = the negative of the base 10 logarithm of the activity of the hydrogen ion; SU = standard units for pH measurement; mg/L = milligrams per liter; CaCO₃ = calcium carbonate; N = nitrogen; TDS = total dissolved solids; min/max = minimum and maximum; % = percent; mph = miles per hour; W/m² = Watts per square meter; SWE = snow water equivalent; NAC = Nevada Administrative Code

Footnotes:

(1) Profile I:

General Chemistry Parameters		
Acidity ⁽²⁾	Chloride	pH (± 0.1 SU)
Alkalinity (as CaCO ₃) Bicarbonate ⁽³⁾ Total ⁽³⁾	Fluoride	Sulfate
	Nitrate + Nitrite (as N)	Total Dissolved Solids
	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) 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⁽⁴⁾, 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 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 ± 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) Constituent concentrations observed in the antimony attenuation model calibration well will be used to verify/calibrate the attenuation capacity available in the mounded groundwater system occurring beneath the TS Ranch Reservoir.
- (8) With the Boulder Valley Settling Pond full commissioning in March 2018, monitoring Point CCE moved from Cofferdam Spillway to the Boulder Valley Settling Pond Weir (BVSP).
- (9) The Permittee shall report any exceedance to the Division and increase monitoring from monthly to weekly.
- (10) The Division may require that the Leeville water treatment plant be placed back into operation to further reduce discharge arsenic concentrations if the Permit Limitation cannot be met.
- (11) Sample location is downstream of treatment (post treatment) at the end of the mixing area as shown on the schematic drawing of the arsenic treatment system submitted with the original application for Permit.
- (12) Sample location must be as near as physically possible to the spring discharge point.
- (13) The sump must be inspected and evacuated on a more frequent basis than weekly if the fluid level is above the top of the sump or the invert of any pipe which discharges into the sump, whichever level is lower, or if the potential exists to exceed the sump capacity. Records are required documenting volume, date, and time of extraction to show that sumps are maintained in this condition.
- (14) 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).
- (15) 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.
- (16) Except as may otherwise be required by this Permit, PAG materials and associated fluids shall be managed in accordance with the approved Permittee document, "*Refractory Ore Stockpile and Waste Rock Dump Design, Construction and Monitoring Plan*" (the 1995 version applies to PAG WRDFs and refractory ore stockpiles constructed prior to 2003; the January 2003 version applies to construction of new PAG WRDFs and refractory ore stockpiles or to construction that expands pre-2003 PAG WRDFs and refractory ore stockpiles beyond their pre-2003 fluid containment structure locations) and the most recent version of the Division guidance document, "Waste Rock, Overburden, and Ore Evaluation." If required in writing by the Division, based on static testing⁽¹⁵⁾ characterization of materials in Parts I.D.13 or

I.D.14 that show the potential for both acid generation and degradation of waters of the State, as managed, the Permittee shall notify the Division in writing and initiate kinetic testing⁽¹⁷⁾ within 10 days.

- (17) If the kinetic test results indicate acid generation conditions exist, the Permittee shall 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.
- (18) 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 ($\mu\text{S}/\text{cm}$) 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 $\text{pH} < 5$ 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⁽¹⁾ metals shall be filtered, digested, and analyzed for the dissolved fraction; samples requiring Uranium⁽⁴⁾ 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⁽⁴⁾ parameters, and specific conductance ($\mu\text{S}/\text{cm}$) 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⁽¹⁴⁾, a Profile I⁽¹⁾, and Uranium⁽⁴⁾ 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.

- (19) Total Petroleum Hydrocarbons (TPH) analyzed by a Nevada-certified laboratory using EPA Method 8015 Modified. If any gasoline-range petroleum is suspected, or if the source-type is unknown, both TPH-P (purgeable) and TPH-E (extractable) are required. Otherwise, only TPH-E is required.

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. Arsenic concentrations at the outfall into the RIBs (RIB sample location V-3 Part I.D.4, conveyance pipeline sample port prior to discharge to the RIBs) shall not exceed 0.02 mg/L for two consecutive months. If an exceedance occurs, analytical data for the previous two months must be reviewed to determine if the average arsenic concentration is greater than 0.02 mg/L; if so, an action plan must then be developed to reduce arsenic concentrations to less than or equal to 0.02 mg/L. Multiple samples may be taken within a given month and reported to the Division to show that the average concentration for that month meets the criteria listed above.
2. During non-irrigation months the arsenic concentrations at the outfall from the water treatment plant at the end of Sand Dune Canal (monitoring point WTP in Part I.D.7) shall not exceed 0.02 mg/L for two consecutive months. If an exceedance occurs, analytical data for the previous two months must be reviewed to determine if the average arsenic concentration was greater than 0.02 mg/L; if so, an action plan must then be developed to reduce arsenic concentrations to less than or equal to 0.02 mg/L. Multiple samples may be taken within a given month and reported to the Division to demonstrate that the average concentrations for that month meet the criteria listed above.
3. Based on the background receiving groundwater characterization, and the Boulder Valley Antimony Attenuation Study, analysis of water samples at the point of discharge at the Boulder Valley Settling Pond Weir (Part I.D.6) shall not result in exceedances of the following maximum constituent concentrations:

Constituent	Ref. Value/ Unit	Constituent	Ref. Value/ Unit
Aluminum	0.20 mg/L	Magnesium	150 mg/L
Antimony	0.040 mg/L	Manganese	0.10 mg/L
Arsenic	0.017 mg/L	Mercury	0.002 mg/L
Barium	2.0 mg/L	Nitrate + Nitrite (as N)	10 mg/L
Beryllium	0.004 mg/L	Nitrogen, Total (as N)	10 mg/L
Cadmium	0.005 mg/L	pH (± 0.1 SU)	6.5-8.5 SU
Chloride	400 mg/L	Selenium	0.05 mg/L
Chromium	0.1 mg/L	Silver	0.1 mg/L
Copper	1.0 mg/L	Sulfate	500 mg/L
Fluoride	4.0 mg/L	Thallium	0.002 mg/L

Iron	0.6 mg/L	Total Dissolved Solids	1,000 mg/L
Lead	0.015 mg/L	Zinc	5.0 mg/L

4. The calculated flow rate measured for monitoring Part I.D.1 shall not exceed 101 MGD.
5. Introduction of chemicals to the Leeville de-sedimentation and Geotube settling system without prior written Division approval based on a product description, Safety Data Sheet, maximum dosage rate, and other information, as applicable, to demonstrate no potential to degrade waters of the State.
6. Discharge to the RIBs shall be managed to prevent overtopping or surface discharge from the basin(s) and the infiltration mound shall be controlled to prevent the formation of surface seeps or artificial springs from the RIB operation.
7. The maximum allowable dewatering water pumping rate and treated water discharge rate into the Discharge Pipeline inlet, is 27,000 gpm.
8. Discharge from the Water Treatment Plant (arsenic co-precipitation) at Pump Station P1 shall not exceed 28.8 MGD.
9. Unless otherwise approved by the Division, water in the Surge Tank Overflow Pond shall be conveyed only to the Leeville Water Treatment Plant.
10. Unless otherwise approved by the Division, a minimum 3-foot freeboard shall be maintained in the Surge Tank Overflow Pond and the treated water Settling Ponds, and a minimum 2-foot freeboard shall be maintained in the Inflow Settling Basins.
11. The Leeville Oil/Water Separator Sedimentation Basin solids shall be removed to an approved disposal location on a frequency to ensure the basins function in accordance with the approved design.
12. The daily accumulation exceeding 150 gallons per day averaged over the quarter in the leak detection sumps identified in Part I.D.10 (all) and Part I.D.14 (LVOWLD only).
13. The daily accumulation exceeding 50 gallons per day averaged over the year in the leak detection sumps identified in Part I.D.10 (all) and Part I.D.14 (LVOWLD only).
14. Failure to meet a Schedule of Compliance date or requirement.
15. The facility shall not degrade waters of the State to the extent that applicable water quality standards and background concentrations are exceeded.

Exceedances of these limitations may be Permit violations and shall be reported as specified in Part II.B.4. Note that any limits related to water quality given above do not apply to water diverted for agricultural use, where NAC 445A.1236 irrigation standards should be observed.

- 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.15, 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;
 - 2. Sudden changes in the data from any monitoring device;
 - 3. The presence of liquids in the leak detection systems;
 - 4. Unauthorized discharges; and
 - 5. Severe erosion or other signs of deterioration in dikes, diversions, or other containment devices.
- J. Prior to initiating permanent closure activities at the water management facility or any water management process component within the facility, the Permittee must have an approved 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 North Block Project NEV0091029. Hazardous waste determination must be made for each source prior to transportation of the affected material from the Permittee's property.
- 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. Any water used for dust suppression from a wash-bay before or after an oil/water separator must be tested for compliance with Profile I and TPH standards initially and then quarterly thereafter. Any water not meeting the Profile I and TPH standards may not be used outside of containment without Division approval.
- N. Continuing Investigations:
 - 1. The Permittee shall submit to the Division for review and approval with each Permit renewal, and with any application to modify the Permit that could affect the water quality of the permitted discharge, an updated hydrogeochemical evaluation of current and predicted future water quality near the Boulder Valley discharge, including the

remaining attenuation capacity for antimony in the infiltration mound system above the pre-infiltration water elevation, the predicted future discharge volume and chemistry, and the resultant potential for degradation of groundwater in response to infiltration at the TS Ranch Reservoir. The evaluation must include other parameters in addition to antimony if the current discharge concentration limits applicable to those parameters have been exceeded in the previous five years. If applicable, the hydrogeochemical evaluation must include additional proposed controls to eliminate any potential for groundwater degradation. 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, or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this Permit.
3. Whenever the Permittee becomes aware that he 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 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. Analytical results from samples collected in accordance with Parts I.D.1, I.D.2, I.D.3, I.D.4, I.D.6, I.D.7, I.D.8, I.D.9, and I.D.12, reported on Nevada Division of Environmental Protection (NDEP) Form 0190 or equivalent;
 - b. 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);
 - c. Feed water flowrate obtained in accordance with Part I.D.1;
 - d. Records of the pumping rates for the locations described in Part I.D.11;

- e. Records for flowrates for locations as described in Parts I.D.6, I.D.12, and I.D.14;
 - f. Groundwater and collar elevations obtained in accordance with Parts I.D.2; I.D.3;
 - g. Monthly water balance calculations in accordance with Part I.D.5;
 - h. Outfall flowrate obtained in accordance with Part I.D.8;
 - i. Monitoring results from the leak detection sump identified in Part I.D.10 (all) and I.D.14 (LVOWLD only), reported on NDEP Form 0590 or equivalent;
 - j. Analytical results of the MWMP-Profile I and Uranium, and NMSP testing for the materials identified in Parts I.D.13 and I.D.14, reported on NDEP Form 0190 and NDEP Form 0620 as appropriate, or equivalent;
 - k. 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;
 - l. Records of the quantity of material disposed or removed, and the identification, location, and type of receiving facility, as described in Parts I.D.13 and I.D.14; and
 - m. A record of releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent.
- Subsequent to any noncompliance or any Project expansion which may lead to an increased discharge rate or frequency, the Division may require an increased monitoring frequency. If the Permittee monitors any parameter at a location designated herein more frequently than required by this Permit, using methods that comply with the requirements in Part II.E., the results of such monitoring shall be included in the quarterly monitoring report.
2. The Permittee shall submit an annual report, in both hard copy and 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. A synopsis of releases on NDEP Form 0390 or equivalent;
 - ii. A brief summary of site operations, construction, and expansion activities, major problems with the water management system and water balance program;
 - iii. Analytical results from samples collected in accordance with Part I.D.3 and I.D.9, reported on NDEP Form 0190 or equivalent;
 - iv. Groundwater elevations obtained in accordance with Part I.D.3; and
 - v. Graphs of pH, TDS, sulfate, arsenic, antimony, fluoride, and boron concentrations versus time for all samples collected in accordance with Parts I.D.1, I.D.2, I.D.3, I.D.4, I.D.6, I.D.7, I.D.8, I.D.9, and I.D.12. 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;

- vi. A table of total monthly precipitation amounts and other weather data, as applicable, recorded in accordance with Parts I.D.15 and I.H, reported for a five-year history previous to the date of submittal;
- vii. An updated version of the facility monitoring and sampling procedures and protocols; and

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.

2. 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 reporting 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.
3. The Permittee shall report to the Administrator any noncompliance with the Permit.
 - a. Each such event shall be reported orally by telephone to (775) 687-9400, not later than 5:00 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. 3.4.
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 components, 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, Uranium, and Profile R 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; 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 water management 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.415, 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 discharge at any location within the State outside of the Project area which is owned or operated by the Permittee but not identified and characterized in a previously submitted Permit application, the Permittee shall submit to the Division an application for a new Permit which identifies the locations of the proposed outfalls, and characterizes the potential for the discharge to release pollutants and degrade waters of the State. The discharge shall not commence until the new Permit is obtained.

3. The Permittee shall notify the Division in writing at least 30 days before the introduction of dewatering water into a new water management process component or into an existing water management process component that has been materially modified, or of the intent to commence active operation of that water management process component. Before introducing dewatering water or commencing active operation, the Permittee shall obtain written authorization from the Division.
4. The Permittee shall obtain a written determination from the Administrator of any planned water management 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.
6. If a toxic effluent standard or prohibition is established under NAC 445A for a toxic pollutant that is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this Permit, this Permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

Prepared by: Allie Thibault
Date: 24 December 2024

Revision 00: Renewal w/ BP updates, combined with Leeville Infiltration permit (NEV2002105)