

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

Permittee: **Lunker Mine, LLC**
Lunker Hill Project
10751 Falls Road, Suite 300
Lutherville, MD 21093

Permit Number: **NEV2003106**
Review Type/Year/Revision: **Renewal 2024, 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 **Lunker Hill Project**, in accordance with the limitations, requirements, and other conditions set forth in this Permit. The Permittee is authorized to process up to **55,000 tons** of ore per year.

The facility is located in Pershing County, within Section 1, Township 34 North, Range 34 East, Mount Diablo Baseline and Meridian, approximately 15 miles north-northwest of Mill City, 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 5 June 2003, as modified by subsequent approved amendments, is accurate and that the facility has been constructed and is being operated as specified in the application. The Permittee must inform the Division of any deviation from, or changes in, the information in the application, which may affect the ability of the Permittee to comply with applicable regulations or Permit conditions.

This Permit is effective as of **8 March 2024**, and shall remain in effect until **8 September 2028**, unless modified, suspended, or revoked.

Signed this 22ND day of **February 2024**



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; and
2. Not release or discharge any process or non-process contaminants from the fluid management system.

B. Schedule of Compliance:

1. At least 30 days prior to termination of planned temporary closure and resumption of operations at the permitted facility, the Permittee shall schedule a reasonable time for the Division to conduct a site inspection to ascertain compliance of the constructed facility with this Permit, the Permit application information, and the Mining Regulations, Nevada Administrative Code (NAC) 445A.350 through 445A.447. Material changes to or departure from the approved facility designs may require additional engineering review, modification of the Permit, and payment of Permit modification fees.

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

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

1. Ore bin with grizzly;
2. Feed conveyor, classifier trommel, shaker tables, and sluice;
3. Three unlined earthen process solution collection and clarification ponds and up to seven water storage tanks; and
4. Transfer pipes, valves, and pumps used in conveyance or control of process fluids or process materials between process components.

D. Monitoring Requirements:

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
<p>1. <u>Water Supply</u> Sample collected at the outlet of the last Holding Tank in use (WS);</p> <p>Approved Sources: Three Fingers Spring, Nugget Gulch Spring, Keystone Mine, and Residence Well</p>	<p>Profile I⁽¹⁾ and Uranium⁽⁴⁾;</p> <p>Identify all approved water sources used</p>	<p>Annually when operating;</p> <p>Annually when operating</p>

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
2. <u>Process Solution</u> Clarified solution from Settling Pond '3'	Profile I ⁽¹⁾ and Uranium ⁽⁴⁾	Quarterly when operating
3. <u>Mined Materials</u> Ore processed (OP) Tailings returned to mine excavation (TR) Pond sediments returned to mine excavation (PSR)	Quantity (tons)	Quarterly

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:

CaCO₃ = calcium carbonate; mg/L = milligrams per liter; N = nitrogen; NAC = Nevada Administrative Code; NDEP = Nevada Division of Environmental Protection; PCS = Petroleum-Contaminated Soil; pH = the negative of the base 10 logarithm of the activity of the hydrogen ion; SU = standard units for pH measurement; < = less than;

Footnotes:

(1) Profile I (see also Part I.G.7):

General Chemistry Parameters		
Acidity ⁽²⁾	Chloride	pH (± 0.1 SU)
Alkalinity (as CaCO ₃) Bicarbonate ⁽³⁾	Fluoride	Sulfate
	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 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.
- 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 use of any chemical not pre-approved in writing by the Division is prohibited.
 2. A minimum 2-foot freeboard must be maintained at all times in the lower-most Settling Pond '3'.
 3. Any ore to be beneficiated, other than the ore characterized for the original Permit application, must be characterized by Meteoric Water Mobility Procedure – Profile I analysis, in accordance with NAC 445A.414.1(d), and the analytical results must be provided to the Division for review and approval prior to bringing that ore onto the Project site or introducing it into any process component.
 4. The sediment shall be routinely removed from the three settling ponds in order to maintain design capacity and returned to the mine excavation.
 5. Failure to meet a Schedule of Compliance requirement.
 6. Approved make-up water supply sources include the Residence Well, Three Fingers Spring, Nugget Gulch Spring, and Keystone Mine.
 7. The Profile I reference values shall not be exceeded except for naturally elevated background water quality constituents, which shall not exceed iron 10 mg/L, magnesium 200 mg/L, manganese 0.2 mg/L, sulfate 1,000 mg/L, and total dissolved solids 2,500 mg/L.

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

- H. The facility shall maintain an automated or manual calibrated rain and snow gauge(s), which shall be monitored at least daily to record precipitation (inches of water) every day that the site is manned. A written and/or electronic record of daily accumulations of precipitation 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; and
 3. 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 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: None Required
- 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, 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 of the solution collected from the monitoring location identified in Part I.D.2 reported on Nevada Division of Environmental Protection (NDEP) Form 0190 or equivalent;
 - b. Monitoring results identified in Part I.D.3; and
 - c. A record of releases, and the remedial actions taken reported on NDEP Form 0490 or equivalent.

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

2. The Permittee shall submit an annual report by February 28th of each year, for the preceding calendar year, which contains the following:
 - a. Analytical results of the water quality sample collected at the Holding Tank discharge identified in Part I.D.1, reported on NDEP Form 0190 or equivalent, and identification of all sources of make-up water used during the reporting year;
 - b. A synopsis of releases on NDEP Form 0390 or equivalent;
 - c. A brief summary of site operations, including the number of tons of ore processed during the year, construction and expansion activities, and major problems with the fluid management system;
 - d. A table of average monthly precipitation amounts recorded in accordance with Part I.H, reported for a five-year history previous to the date of submittal;
 - e. An updated evaluation of the closure plan using specific characterization data for each process component with respect to achieving stabilization; and
 - f. Tables of iron, magnesium, manganese, arsenic, sulfate, chloride, nitrate + nitrite (as N), fluoride, zinc, and total dissolved solids (TDS) concentration (as applicable), versus time for all fluid sampling points. These tables shall display a five-year history previous to the date of submittal. Additional parameters may be required by the Division if deemed necessary.
3. Release Reporting Requirements: The following applies to facilities with an approved Emergency Response Plan. If a site does not have an approved Emergency Response Plan, then all releases must be reported as per NAC 445A.347 or NAC 445A.3473, as appropriate.
 - 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 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 is complete. Therefore, unless permanent closure has 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. When ordered consistent with Nevada Statutes, the Permittee shall furnish any relevant information in order to determine whether cause exists for modifying, revoking and reissuing, or permanently revoking this Permit, or to determine compliance with this Permit.
5. The Permittee shall maintain a copy of, and all modifications to, the current Permit at the permitted facilities at all times.
6. The Permittee is required to retain during operation, closure, and post-closure monitoring, all records of monitoring activities and analytical results, including all original strip chart 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.
7. The provisions of this Permit are severable. If any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not thereby be affected.
8. The Permittee is authorized to manage fluids and solid wastes in accordance with the conditions of this Permit. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under the Water Pollution Control Statutes for releases or discharges from facilities or units not regulated by this Permit. NRS 445A.675 provides that any person who violates a Permit condition is subject to administrative or judicial action provided in NRS 445A.690 through 445A.705.

D. Division Authority

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

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

E. Sampling and Analysis Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. For each measurement or sample taken pursuant to the conditions of this Permit, the Permittee shall record the following information:
 - a. The exact place, date, and time of the inspection, observation, measurement, or sampling; and
 - b. The person(s) who inspected, observed, measured, or sampled.
3. Samples must be taken, preserved, and labeled according to Division approved methods.
4. Standard environmental monitoring chain of custody procedures must be followed.
5. Samples shall be analyzed by a laboratory certified or approved by the State of Nevada, as applicable for the method(s) being performed. The Permittee must identify in all required reports the certified and approved laboratories used to perform the analyses, laboratory reference numbers, and sample dates, and for the electronic version of each report only, include all associated laboratory analytical reports, including test results, test methods, chain-of-custody forms, and quality assurance/quality control documentation.
6. The accuracy of analytical results, unless otherwise specified, shall be expressed in mg/L and be reliable to at least two significant digits. The analytical methods used must have a practical quantitation limit (PQL) equal to or less than one-half the reference value for Profile I parameters. Laboratories shall report the lowest reasonable PQL based on in-house method detection limit studies. Samples shall be analyzed by methods listed in 40 CFR Part 136 Table 1B, as applicable, by a laboratory 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; 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.412, 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: 18 January 2024

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