STATE OF NEVADA

Department of Conservation and Natural Resources

Division of Environmental Protection

Bureau of Mining Regulation and Reclamation

Water Pollution Control Permit

Permittee:

KG Mining (Bald Mountain) Inc.

Yankee Mine

435 Jiggs Highway, Unit 16 Spring Creek, NV 89815

Permit Number:
Review Type/Year/Revision:

NEV0089008 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 close the **Yankee Mine**, in accordance with the limitations, requirements, and other conditions set forth in this Permit. The Permittee is not authorized to mine or process ore.

The facility is located in White Pine County, within Sections 10 through 15 and Sections 22 through 27 Township 21 North (T21N), Range 57 East (R57E), Mount Diablo Baseline and Meridian approximately 30 miles northeast of Eureka, 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 24 September 2018, as modified by subsequent approved amendments, is accurate and that the facility has been constructed and is being closed 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 14 June 2024, and shall remain in effect until 16 January 2029 unless modified, suspended, or revoked.

Signed this

day of June 2024

Rob Kuczynski, P.E.

Chief, Bureau of Mining Regulation and Reclamation

I. Specific Facility Conditions and Limitations

- A. In accordance with operating plans, closure 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. Any new process components or material modifications of existing process components shall be designed to contain all process fluids including all meteoric waters which enter the system as a result of the 500-year, 24-hour event); and
 - 3. Not release or discharge any process or non-process contaminants from the fluid management system except as approved by the Division in accordance with this Permit and any associated plans, reports, studies, and designs.

B. Schedule of Compliance:

The schedule of compliance item above is 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. Lined heap leach pad and solution collection area;
 - 2. Solution collection pipe, lined solution collection ditch, and corresponding leak detection system;
 - 3. Lined evapotranspiration basin and corresponding leak detection system;
 - 4. Transfer pipes, valves, and pumps used in conveyance, control or detection of process fluids between process components; and
 - 5. All vaults, tanks, basins, sumps, and infiltration field piping used to contain and distribute solution.

D. Monitoring Requirements:

| Identification | | <u>Parameter</u> | Frequency |
|----------------|---|---|--|
| 1. | Water Supply | | |
| | YWS-1 | Profile I ⁽¹⁾ , Uranium ⁽⁴⁾ , groundwater elevation (ft. AMSL), collar elevation (ft. AMSL) | Annual (2 nd Quarter) |
| 2. | Heap Draindown | | |
| | YK-ET Influent (YKETIN) | Profile I ⁽¹⁾ , Uranium ⁽⁴⁾ , flow (gpm) | Annual (2 nd Quarter) |
| 3. | Evapotranspiration Basin Piezometer ET Basin solution | Profile I ⁽¹⁾ , Uranium ⁽⁴⁾ , depth of water in basin (ft.), photos of basin | Annual (2 nd Quarter) |
| 4. | Leak Detection Ports/Sumps Heap Leach Pad Leak Detection (YLD1, YLD2, YLD4) Evapotranspiration Basin (YLD3) | Average daily accumulation (gpd) | Annual ⁽⁶⁾ (2 nd Quarter) |
| 5. | Evapotranspiration Basin Effluent YK-Dosing Siphon (YKEOUT) | Profile I ⁽¹⁾ , Uranium ⁽⁴⁾ , flow (gpm), total discharged to infiltration field (gpy) | Annual (2 nd Quarter) |

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; CaCO₃ = calcium carbonate; EPA = U.S. Environmental Protection Agency; ET = evapotranspiration; ft. = feet; gal = gallons; gpd = gallons per day; gpm = gallons per minute; gpy = gallons per year; mg/L = milligrams per liter; N = nitrogen; NAC = Nevada Administrative Code; NDEP = Nevada Division of Environmental Protection; pCi/L = picocuries per liter; pH = the negative of the base 10 logarithm of the activity of the hydrogen ion; PCS = Petroleum-Contaminated Soil; PQL = Practical Quantitation Limit; Q = calendar quarter of the year; RDL = Reported Detection Limit; SU = standard units for pH measurement; SWE = snow water equivalent; TPH = total petroleum

hydrocarbons; WAD = weak acid dissociable; ; > = greater than; \geq = greater than or equal to; <= less than; °F = degrees Fahrenheit; μ g/L = micrograms per liter; μ S/cm = micro-Siemens per centimeter

Footnotes:

(1) Profile I:

| General Chemistry Pa | rameters | |
|----------------------------|--------------------------|------------------------|
| Acidity ⁽²⁾ | Chloride | pH (± 0.1 SU) |
| Alkalinity (as CaCO3) | Fluoride | Sulfate |
| Bicarbonate ⁽³⁾ | Nitrate + Nitrite (as N) | Total Dissolved Solids |
| Total ⁽³⁾ | Nitrogen Total (as N) | WAD Cyanide |
| Metals Dissolved | | |
| Aluminum | Chromium | Potassium |
| Antimony | Copper | Selenium |
| Arsenic | Iron | Silver |
| Barium | Lead | Sodium |
| Beryllium | Magnesium | Thallium |
| Cadmium | Manganese | Zinc |
| Calcium | Mercury | |

- (2) All sample analyses resulting in a pH value less than or equal to 5.0 SU shall also be analyzed for acidity (mg/L, as 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, 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) The sump must be inspected and evacuated on a more frequent basis 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. The sumps must also be inspected during, if possible, and after major storm events in accordance with Part I.I, and at any other time when an increase in leakage flow may occur (e.g., during spring melt, etc.) Records are required documenting volume, date, and time of extraction to show that sumps are maintained in this condition.
- E. Annual monitoring reports and release reporting shall be in accordance with Part II.B.
- F. All sampling and analytical accuracy shall be in accordance with Part II.E.
- G. Permit Limitations
 - 1. The daily accumulation or flow exceeding 50 gallons per day averaged over the year in the leak detection sump identified in Part I.D.4.
 - 2. The facility shall not discharge to the environment (infiltration field) any solution containing WAD cyanide greater than 0.2 mg/L as determined at the ET Basin piezometer identified in Part I.D.3.
 - 3. Failure to meet a Schedule of Compliance date or requirement.
 - 4. The facility shall not degrade waters of the State to the extent that applicable water quality standards or reference values, and background concentrations, are exceeded.
 - 5. Spent ore material may not be removed from the heap leach pad, except with prior written authorization from the Division.

Exceedances of these limitations may be Permit violations and shall be reported as specified in Part II.B.3.

- H. The facility shall maintain automated or manual calibrated rain and snow gauge(s), which shall be monitored at least daily, unless otherwise approved by the Division to record precipitation (inches of water, including snow water equivalent) at a Division-approved location, e.g., South Operation Area Vantage Complex Project. A written and/or electronic record of precipitation data, and any other weather data required in Part I.D, shall be maintained at the office of record of the Permittee and shall be submitted to the Division upon request, with each Permit renewal application, and pursuant to Part II.B.1, in a Division-approved electronic format.
- I. The Permittee shall inspect all control devices, systems, and facilities annually, 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.

If detected, the Permittee shall report the above conditions in accordance with Part II.B.3, except such a report is not required for the presence of liquids in leak detection systems unless a leak detection limitation in Part I.G is exceeded.

- J. Prior to initiating permanent closure activities at the facility, or at any process component or other source 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 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, 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 an annual report, in a Division-approved electronic format, by July 28th of each year, for the preceding calendar year, which contains the following:
 - a. Analytical results of water quality samples collected from water supply wells identified in Part I.D.1, I.D.2, I.D.3, and I.D.5, as applicable, reported on NDEP Form 0190 or equivalent;
 - b. Water levels for site monitoring wells and piezometer identified in Parts I.D.1 and I.D.3;
 - c. Other monitoring results from the piezometer identified in Part I.D.3;
 - d. Monitoring results from the leak detection ports and sumps identified in Part I.D.4, reported on NDEP Form 0590 or equivalent;
 - e. Heap leach pad and evapotranspiration basin flows identified in Parts I.D.2 and I.D.5;
 - f. A record of spills and releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent;
 - g. A brief summary of closure activities, including any problems with the fluid management system;
 - h. A table of total monthly precipitation amounts, and other weather data, as applicable, recorded in accordance with Part I.H, reported since initial Permit issuance;
 - i. An updated version of the facility monitoring and sampling procedures and protocols;
 - j. Graphs of heap leach pad draindown and ET effluent flow rates, leak detection flow rates, alkalinity, antimony, arsenic, cadmium, chloride, iron, mercury, nitrate + nitrite (as N), pH, selenium, sulfate, thallium, total dissolved solids (TDS), WAD cyanide, and zinc concentration (as applicable), versus time for all fluid monitoring points. These graphs shall display the history beginning when active component closure began. Additional parameters may be required by the Division if deemed necessary; and,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.
- k. 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.
- 1. 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.3.b.
- m. 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.2.a.
- n. A release of a non-petroleum hazardous substance not subject to Parts II.B.2.a. or II.B.2.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. 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.3.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 annually on NDEP Form 0390 or equivalent.
- o. Petroleum Products and Coolants: If a release is subject to Parts II.B.2.a. or II.B.2.b., report as specified in Part II.B.2.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.2.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 annually on NDEP Form 0390 or equivalent.
- 2. 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.
- 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 office of record of the Permittee at all times.
- 8. The Permittee is required to retain during closure, and post-closure monitoring, all records of monitoring activities and analytical results, including all original strip chart or data logger recordings for continuous monitoring instrumentation, and all calibration and maintenance records. This period of retention must be extended during the course of any unresolved litigation.

- 9. The provisions of this Permit are severable. If any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not thereby be affected.
- 10. The Permittee is authorized to manage fluids and solid wastes in accordance with the conditions of this Permit. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under the Water Pollution Control Statutes for releases or discharges from facilities or units not regulated by this Permit. NRS 445A.675 provides that any person who violates a Permit condition is subject to administrative or judicial action provided in NRS 445A.690 through 445A.705.

D. Division Authority

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

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

E. Sampling and Analysis Requirements

- 1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- 2. For each measurement or sample taken pursuant to the conditions of this Permit, the Permittee shall record the following information:
 - a. The exact place, date, and time of the inspection, observation, measurement, or sampling; and
 - b. The person(s) who inspected, observed, measured, or sampled.
- 3. Samples must be taken, preserved, and labeled according to Division approved methods.
- 4. Standard environmental monitoring chain of custody procedures must be followed.
- 5. Samples shall be analyzed by a laboratory certified or approved by the State of Nevada, as applicable for the method(s) being performed. The Permittee must

identify in all required reports the certified and approved laboratories used to perform the analyses, laboratory reference numbers, and sample dates, and for the electronic version of each report only, include all associated laboratory analytical reports, including test results, test methods, chain-of-custody forms, and quality assurance/quality control documentation.

6. The accuracy of analytical results, unless otherwise specified, shall be expressed in mg/L and be reliable to at least two significant digits. The analytical methods used must have a practical quantitation limit (PQL) equal to or less than one-half the reference value for Profile I parameters. Laboratories shall report the lowest reasonable PQL based on in-house method detection limit studies. Samples shall be analyzed by methods listed in 40 CFR Part 136 Table 1B, as applicable, by a laboratory 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; 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 POL shall be reported quantitatively by listing the POL value preceded by the "<" symbol.

F. Permit Modification Requirements

- 1. Any material modification, as defined at NAC 445A.365, plan to construct a new process component, or proposed change to Permit requirements must be reported to the Division by submittal of an application for a Permit modification, or if such changes are in conformance with the existing Permit, by submittal of a written notice of the changes. The Permit modification application must comply with NAC 445A.391 through 445A.399, 445A.410, 445A.414, 445A.4155, 445A.416, 445A.417, 445A.440, and 445A.442, as applicable. The construction or modification shall not commence, nor shall a change to the Permit be effective, until written Division approval is obtained.
- 2. Prior to the commencement of mining activities at any site within the State which is owned or operated by the Permittee but not identified and characterized in a previously submitted application or report, the Permittee shall submit to the Division a report which identifies the locations of the proposed mine areas and waste disposal sites, and characterizes the potential of mined materials and areas to release pollutants. Prior to development of these areas the Division shall determine if any of these new sources will be classified as process components and require engineered containment as well as Permit modification.
- 3. The Permittee shall notify the Division in writing at least 30 days before the introduction of process solution into a new process component or into an existing process component that has been materially modified, or of the intent

to commence active operation of that process component. Before introducing process solution or commencing active operation, the Permittee shall obtain written authorization from the Division.

- 4. The Permittee must obtain a written determination from the Administrator of any planned process component construction or material modification, or any proposed change to Permit requirements, as to whether it is considered a Permit modification, and if so, what type.
- 5. The Permittee must give advance notice to the Administrator of any planned changes or activities which are not material modifications in the permitted facility that may result in noncompliance with Permit requirements.

Prepared by:

Karl W. McCrea

Date:

28 May 2024

Revision 00:

2024 Renewal, Permit effective date 14 June 2024