



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

Brian Sandoval, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

28 October 2021

Mr. John D. Welsh, P.E.
President
Bell Mountain Exploration Corp.
250 Rock Boulevard, Suite 118
Reno, NV 89503

VIA ELECTRONIC MAIL and CERTIFIED MAIL
Certified Mail No. 9171 9690 0935 0238 8274 07

**Re: Bell Mountain Mine, Water Pollution Control Permit NEV2020115
New Permit, Notice of Decision and Permit Effective Date**

Dear Mr. Welsh:

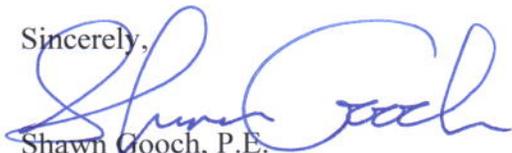
Enclosed please find the following documents associated with the Bell Mountain Mine Project WPCP NEV2020115:

1. Notice of Decision,
2. Permit NEV2020115, and
3. Fact Sheet.

The new Permit is effective 12 November 2021. Appeals may be filed with the State Environmental Commission (SEC) on Form 3 until 5:00 PM on 07 November 2021. The Permit is valid until 11 November 2026 unless modified, suspended, or revoked.

Please review the enclosed documents and advise me immediately of any errors or omissions. Bell Mountain Exploration Corp. should familiarize all responsible parties with the monitoring and reporting requirements of the revised Permit.

If you have any questions, please contact me at (775) 687-9557, or at sgooch@ndep.nv.gov

Sincerely,

Shawn Gooch, P.E.
Senior Engineer, Regulation Branch
NDEP Bureau of Mining Regulation & Reclamation

Enc: Notice of Decision, Permit, and Fact Sheet

cc: John Welsh, P.E., President, Bell Mountain Exploration Corp.
Rob Kuczynski, P.E., Supervisor, Regulation Branch, NDEP-BMRR
Rachel Burnham, Compliance Inspector, Regulation Branch, NDEP-BMRR
Susan Yang, P.E., Permit Writer, Reclamation Branch, NDEP-BMRR
Kenny Pirkle, Field Mine Biologist, Nevada Department of Wildlife
Tim Jefferson, Geologist, BLM, Stillwater Field Office
Dean Patterson, Churchill County Public Works, Planning, & Zoning



28 October 2021

NOTICE OF DECISION

**WATER POLLUTION CONTROL PERMIT
NUMBER NEV2020115**

**Bell Mountain Exploration Corp.
Bell Mountain Mining Project**

The Administrator of the Nevada Division of Environmental Protection (the Division) has decided to issue new Water Pollution Control Permit NEV2020115 to Bell Mountain Exploration Corp. This Permit authorizes the construction, operation, and closure of approved mining facilities in Churchill County, Nevada. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.350 through 445A.447, to assure that the waters of the State will not be degraded by this operation, and that public safety and health will be protected.

The Permit will become effective 12 November 2021. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statute (NRS) 445A.605 and NAC 445A.407. All requests for appeals must be filed by 5:00 PM, 07 November 2021, on Form 3, with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. For more information, contact Shawn Gooch at (775) 687-9557 or visit the Division public notice website at <https://ndep.nv.gov/posts/category/land>.

No comments were received during the public comment period.

STATE OF NEVADA

Department of Conservation and Natural Resources

Division of Environmental Protection

Bureau of Mining Regulation and Reclamation

Water Pollution Control Permit

Permittee: **Bell Mountain Exploration Corp.
Bell Mountain Mining Project
250 Rock Boulevard, Suite 118
Reno, NV 89503**

Permit Number: **NEV2020115**

Review Type/Year/Revision: **New Permit 2021, 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 **Bell Mountain Mining Project**, in accordance with the limitations, requirements, and other conditions set forth in this Permit. The Permittee is authorized to process up to **1,500,000 tons** of ore per year.

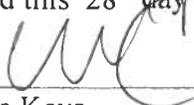
The facility is located in Churchill County, within portions of Sections 1-3, 10-12, and 15 of Township 15 North (T15N), Range 34 East (R34E); and portions of Sections 2, 3, 10, 11, 14, 15, 22, 23, 26, 27, 34, T16N, R34E; Mount Diablo Baseline and Meridian, approximately 40 miles east of the town of Fallon, 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 28 August 2020, 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 **12 November 2021**, and shall remain in effect until **11 November 2026**, unless modified, suspended, or revoked.

Signed this 28th day of **October 2021**.



for Aimee Keys
Chief, Bureau of Mining Regulation and Reclamation

I. Specific Facility Conditions and Limitations

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

1. Construct, operate, and close the facility in accordance with those plans;
2. Contain within the fluid management system all process fluids including all meteoric waters which enter the system as a result of the 25-year, 24-hour storm event; and
3. Not release or discharge any process or non-process contaminants from the fluid management system.

B. Schedule of Compliance:

1. No later than 180 days after the effective date of this Permit (**Day Month Year**) the Permittee shall submit to the Division for review and approval a Tentative Plan for Permanent Closure (TPPC) in accordance with Nevada Administrative Code (NAC) 445A.398 and Division guidance document, Guidance for Preparing Tentative Plans for Permanent Closure.

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. Lined heap leach pad and solution collection area;
2. Solution collection pipe and lined solution collection ditch;
3. Leak detection system for the pad, solution collection area, and collection ditch;
4. Double lined event pond and corresponding leak detection systems;
5. Transfer pipes, valves, and pumps used in conveyance, control, or detection of process fluids between process components; and
6. Process recovery building, including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building.

D. Monitoring Requirements:

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
1. <u>Water Supply</u> Production Well (PW-1)	Profile I ⁽¹⁾	Initially then annually
2. <u>Leach Pad, Solution Collection Pipeline Leak Detection</u> Leak Detection Pipes (LDP 1-5)	Average daily accumulation (gpd)	Weekly ⁽³⁾ (once commissioned)

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
3. <u>Pond Leak Detection (sump capacity)</u> Event Solution Pond (PSP) (4,490 gal)	Average daily accumulation (gpd)	Weekly ⁽³⁾ (once commissioned)
4. <u>Piezometer Measurements</u> Monitoring Well (MW-1)	Hydraulic head (feet)	Quarterly (once commissioned)
5. <u>Process Solution</u> Pregnant Tank (PT) Barren Tank (BT) Event Pond (EP)	Profile I ⁽¹⁾	Quarterly (once commissioned)
6. <u>Mined Materials</u> Waste Rock (WR), Ore Stockpile (OS); Leach Pad Ore (LO)	MWMP ⁽⁴⁾ -Profile I ⁽¹⁾ and ANP/AGP ⁽⁵⁾⁽⁶⁾ ; ANP/AGP ⁽⁵⁾⁽⁶⁾	Quarterly; Quarterly
7. <u>Waste Rock Disposal Areas</u> Main & East Ridge WRDAs (WRDA-1 and WRDA-2); Each seep that is flowing		Semi-Annually (Q2 and Q4); Semi-Annually, when flowing (Q2 and Q4)
8. <u>Weather Station Facility</u> Ambient Conditions	Ambient temperature, (min/max), relative humidity (%), wind speed (mph), wind direction (azimuth degree), total precipitation (inches), solar irradiance (W/m ²), and SWE (inches)	Daily (following commencement of construction)

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:

ANP/AGP = Acid Neutralizing Potential: Acid Generation Potential ratio; ASTM = American Society for Testing and Materials; CaCO₃ = calcium carbonate; EPA = U.S. Environmental Protection Agency; gpd = gallons per day; mg/L = milligrams per liter; MWMP = Meteoric Water Mobility Procedure; 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; PQL = Practical Quantitation Limit; min/max = minimum and maximum; % = percent; mph = miles per hour; W/m² = watts per square meter; SWE = snow water equivalent; WAD = weak acid dissociable; * = multiplication symbol; > = greater than; ≥ = greater than or equal to; < = less than; μS/cm = microSiemens per centimeter; Q = calendar quarter of the year

Footnotes:

(1) Profile I:

Alkalinity (as CaCO ₃)	Cadmium	Magnesium	Silver
Bicarbonate	Calcium	Manganese	Sodium
Total	Chloride	Mercury	Sulfate
Aluminum	Chromium	Nitrate + Nitrite (as N)	Thallium
Antimony	Copper	Nitrogen, Total (as N)	Total Dissolved Solids
Arsenic	Fluoride	pH (± 0.1 SU) ⁽⁸⁾	Uranium ⁽²⁾
Barium	Iron	Potassium	WAD Cyanide
Beryllium	Lead	Selenium	Zinc

(2) If uranium concentration is ≥0.010 mg/l, additional analysis for uranium (total) is required. If the uranium (total) concentration is ≥0.030, additional analysis for the Profile I-R is required.

If Uranium is >0.03 mg/L in solution or is known or suspected to be ≥ 0.05% in ore, the Permittee should contact the Nevada Department of Health and Human Services - Radiation Control Program to discuss characterization and associated Permitting or licensing requirements.

(3) 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.

(4) 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).

- (5) When static testing⁽⁶⁾ characterization of Mined Materials shows the potential for acid generation as set forth in the current version of the Division guidance document “Waste Rock, Overburden, and Ore Evaluation,” the Permittee shall, as applicable, notify the Division in writing and initiate kinetic testing⁽⁷⁾ within 10 days.

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 NAC 445A.359.

- (6) Acid Neutralizing Potential/Acid Generating Potential (ANP/AGP, also known as static testing or acid-base accounting) shall be performed by a Nevada-approved laboratory, using a LECO-type analysis, with full sulfur speciation if ANP/AGP < 1.2, in accordance with the most current update of the Nevada Modified Sobek Procedure.
- (7) 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, pH, specific conductance ($\mu\text{S}/\text{cm}$), acidity and/or alkalinity (as deemed appropriate by the laboratory), sulfate, iron (total, plus ferric and ferrous speciation if total iron > 0.6 mg/L and pH < 5 SU), and dissolved calcium and magnesium; weekly filtered extracts per the method will be digested and analyzed for total recoverable concentrations during week 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⁾ parameters, and specific conductance ($\mu\text{S}/\text{cm}$) and acidity and/or alkalinity shall be recorded as recommended by the analytical laboratory; final results reported shall include initial and final static test results⁽⁵⁾, a Profile I⁽¹⁾ 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.
- (8) All sample analyses resulting in a pH value less than or equal to 5.0 SU shall also be analyzed for acidity (mg/L, as CaCO_3 equivalent).
- (9) Provide a visual evaluation of each waste rock storage facility for presence of water and seepage. For presence of water, identify whether the surface and toes of the waste rock storage facility are dry, damp, or wet (ponded or flowing water). If seepage is emanating from any portion of a waste rock storage facility, the Permittee shall perform the required monitoring for seeps.
- E. Quarterly and annual monitoring reports and release reporting shall be in accordance with Part II.B.
- F. All sampling and analytical accuracy shall be in accordance with Part II.E.

G. Permit Limitations

1. The daily accumulation or flow exceeding 75 gallons per day averaged over the quarter in the leak detection pipe identified in Part I.D.2.
2. The daily accumulation or flow exceeding 25 gallons per day averaged over the year in the leak detection pipe identified in Part I.D.2.
3. The daily accumulation or flow exceeding 150 gallons per day averaged over the quarter in the leak detection sump identified in Part I.D.3.
4. The daily accumulation or flow exceeding 50 gallons per day averaged over the year in the leak detection sump identified in Part I.D.3.
5. Failure to meet a Schedule of Compliance date or requirement.
6. The storage of process solution in a single-lined pond for more than 20 consecutive days for any single event.
7. Except as otherwise allowed by this Permit, a minimum 2-foot freeboard shall be maintained in all ponds.
8. Heap leach pads, as measured vertically from the top of the synthetic liner for any point on the pad, constructed in excess of a maximum permitted elevation of 160 feet over minimum 80-mil thickness HDPE synthetic liner.
9. The cumulative solution application rate to the heap leach pad should not exceed the permitted 600 gallons per minute (gpm). Additionally, the solution application rate *per unit area* should not exceed 0.004 gpm/ft².
10. PCS that exceeds screening levels shall not be placed at an on-site disposal location.
11. 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.

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

- H. The facility shall maintain automated or manual calibrated rain and snow gauge(s), which shall be monitored at least daily to record precipitation (inches of water, including snow water equivalent). A written and/or electronic record of precipitation data, and any other weather data required in Part I.D.8, shall be maintained on site and shall be submitted to the Division upon request, with each Permit renewal application, and pursuant to Parts II.B.1 and II.B.2, as applicable, in a Division-approved electronic format.
- I. The Permittee shall inspect all control devices, systems, and facilities weekly, and during (when possible) and after major storm events. These inspections are performed to detect evidence of:
1. Deterioration, malfunction, or improper operation of control or monitoring systems;
 2. Sudden changes in the data from any monitoring device;
 3. The presence of liquids in leak detection systems; and

4. Severe erosion or other signs of deterioration in dikes, diversions, closure covers, or other containment devices.
- J. Prior to initiating permanent closure activities at the facility, or at any process component or other source within the facility, the Permittee 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.
- M. When performing dust suppression activities, the Permittee shall use best management practices and appropriate selection of water source and additives to prevent degradation of waters of the State. If a dust suppressant exceeds a water quality standard and the corresponding natural background water concentration in the area where dust suppression will occur, the Permittee shall demonstrate no potential to degrade waters of the State.
- N. Continuing Investigations:
 1. The Permittee shall submit to the Division for review and approval an updated waste rock management plan (WRMP) with any application to renew or modify the Permit that could affect the WRMP. A revised WRMP must also be approved prior to initiating mining or in-pit backfill activities not previously approved. The WRMP must include representative characterization data for all anticipated waste rock and overburden in accordance with the current version of the Division guidance document "Waste Rock, Overburden, and Ore Evaluation," in addition to a detailed description of how, when, and where the materials will be managed and monitored, and appropriate controls to eliminate any potential to degrade waters of the State, if applicable. Approval may require modification of the Permit and payment of modification fees. If the Permittee determines that renewal of the Permit will not affect the WRMP, in lieu of an updated WRMP, the Permittee may submit to the Division for review and approval an evaluation and determination of the continued suitability and adequacy of the existing Division-approved WRMP. The evaluation shall consider current conditions, changes to site operations and physical conditions, and monitoring results since WRMP approval.

II. General Facility Conditions and Limitations

A. General Requirements

1. The Permittee shall achieve compliance with the conditions, limitations, and requirements of the Permit upon commencement of each relevant activity. The Administrator may, upon the request of the Permittee and after public notice (if required), revise or modify a Schedule of Compliance in an issued Permit if he or she determines good and valid cause (such as an act of God, a labor strike, materials shortage, or other event over which Permittee has little or no control) exists for such revision.

2. The Permittee shall at all times maintain in good working order and operate as efficiently as possible, all devices, facilities, and systems installed or used by the Permittee to achieve compliance with the terms and conditions of this Permit.
3. Whenever the Permittee becomes aware that he or she failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or correct information. Any inaccuracies found in this information may be grounds for revocation or modification of this Permit and appropriate enforcement action.

B. Reporting Requirements

1. The Permittee shall submit quarterly reports, in a Division-approved electronic format, which are due to the Division on or before the 28th day of the month following the quarter and must contain the following:
 - a. Monitoring results from the leak detection sumps identified in Part I.D.2 and I.D.3, reported on Nevada Division of Environmental Protection (NDEP) Form 0590 or equivalent;
 - b. Monitoring results from piezometer identified in Part I.D.4.
 - c. Analytical results of the solution collected from monitoring locations identified in Part I.D.5, reported on NDEP Form 0190 or equivalent;
 - d. Analytical results of the MWMP-Profile I and ANP/AGP testing for the materials identified in Part I.D.6, reported on NDEP Form 0190 and NDEP Form 0620 as appropriate, or equivalent;
 - e. Monitoring results for the waste rock disposal areas identified in Part I.D.7, as applicable;
 - f. A record of releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent; and
 - g. 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.

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

2. The Permittee shall submit an annual report, in a Division-approved electronic format, by February 28th of each year, for the preceding calendar year, which contains the following:
 - a. Analytical results of water quality samples collected from water supply wells identified in Part I.D.1, reported on NDEP Form 0190 or equivalent;
 - 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 milled or placed on heaps (as applicable) during the year, construction and expansion activities, and major problems with the fluid management system;
 - d. A table of total monthly precipitation amounts and other weather data, as applicable, recorded in accordance with Parts I.D.8 and I.H, reported for either a five-year history previous to the date of submittal or the history since initial Permit issuance, whichever is shorter;
 - e. An updated version of the facility monitoring and sampling procedures and protocols, as applicable;
 - f. An updated evaluation of the closure plans, as applicable, using specific characterization data for each process component with respect to achieving stabilization; and
 - g. Graphs of leak detection flow rates, pH, total dissolved solids (TDS), sulfate, chloride, nitrate + nitrite (as N), WAD cyanide, fluoride, zinc, and arsenic concentration (as applicable), versus time for all fluid sampling points. These graphs shall display either a five-year history previous to the date of submittal or the history since initial Permit issuance, whichever is shorter. Additional parameters may be required by the Division if deemed necessary.
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. 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. 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.
- a. Each such event shall be reported orally by telephone to (775) 687-9400, not later than 5:00 P.M. of the next regular work day from the time the Permittee has knowledge of the circumstances. This report shall include the following:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident, condition, or circumstance;
 - iv. If reportable hazardous substances were released, identify material and report total gallons and quantity of contaminant;
 - v. Human and animal mortality or injury;
 - vi. An assessment of actual or potential hazard to human health and the environment outside the facility; and
 - vii. If applicable, the estimated quantity of material that will be disposed and the disposal location.
 - b. A written summary shall be provided within 10 days of the time the Permittee makes the oral report. The written summary shall contain:
 - i. A description of the incident and its cause;
 - ii. The periods of the incident (including exact dates and times);
 - iii. If reportable hazardous substances were released, the steps taken and planned to complete, as soon as reasonably practicable, an assessment of the extent and magnitude of the contamination pursuant to NAC 445A.2269;
 - iv. Whether the cause and its consequences have been corrected, and if not, the anticipated time each is expected to continue; and
 - v. The steps taken or planned to reduce, eliminate, and prevent recurrence of the event.
 - c. The Permittee shall take all available and reasonable actions, including more frequent and enhanced monitoring to:
 - i. Determine the effect and extent of each incident;

- ii. Minimize any potential impact to the waters of the State arising from each incident;
 - iii. Minimize the effect of each incident upon domestic animals and all wildlife; and
 - iv. Minimize the endangerment of the public health and safety which arises from each incident.
- d. If required by the Division, the Permittee shall submit, as soon as reasonably practicable, a final written report summarizing any related actions, assessments, or evaluations not included in the report required in Part II.B.4.b., and including any other information necessary to determine and minimize the potential for degradation of waters of the State and the impact to human health and the environment. Submittal of the final report does not relieve the Permittee from any additional actions, assessments, or evaluations that may be required by the Division.

C. Administrative Requirements

1. A valid Permit must be maintained until permanent closure and post-closure monitoring are complete. Therefore, unless permanent closure and post-closure monitoring have been completed and termination of the Permit has been approved in writing by the Division, the Permittee shall apply for Permit renewal not later than 120 days before the Permit expires.
2. Except as required by NAC 445A.419 for a Permit transfer, the Permittee shall submit current Permit contact information described in paragraphs (a) through (c) of subsection 2 of NAC 445A.394 within 30 days after any change in previously submitted information.
3. All reports and other information requested by the Administrator shall be signed and certified as required by NAC 445A.231.
4. All reports required by this Permit, including, but not limited to, monitoring reports, corrective action reports, and as-built reports, as applicable, and all applications for Permit modifications and renewals, shall be submitted in both hard copy and a Division-approved electronic format.
5. The Permittee shall submit any new or updated Universal Transverse Mercator (UTM) location data for all monitoring points specified in Part I.D, expressed in meters and decimals of a meter, using the Nevada Coordinate System of 1983 (also known as the North American Datum of 1983 or NAD83, ref NRS 327.005), with each Permit renewal, as-built report, and monitoring plan update, as applicable. Data shall be submitted electronically to the Division in Excel format.
6. When ordered consistent with Nevada Statutes, the Permittee shall furnish any relevant information in order to determine whether cause exists for modifying, revoking and reissuing, or permanently revoking this Permit, or to determine compliance with this Permit.

7. The Permittee shall maintain a copy of, and all modifications to, the current Permit at the permitted facilities at all times.
8. The Permittee is required to retain during operation, closure, and post-closure monitoring, all records of monitoring activities and analytical results, including all original strip chart or data logger recordings for continuous monitoring instrumentation, and all calibration and maintenance records. This period of retention must be extended during the course of any unresolved litigation.
9. The provisions of this Permit are severable. If any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not thereby be affected.
10. The Permittee is authorized to manage fluids and solid wastes in accordance with the conditions of this Permit. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under the Water Pollution Control Statutes for releases or discharges from facilities or units not regulated by this Permit. NRS 445A.675 provides that any person who violates a Permit condition is subject to administrative or judicial action provided in NRS 445A.690 through 445A.705.

D. Division Authority

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

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

E. Sampling and Analysis Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. For each measurement or sample taken pursuant to the conditions of this Permit, the Permittee shall record the following information:
 - a. The exact place, date, and time of the inspection, observation, measurement, or sampling, and
 - b. The person(s) who inspected, observed, measured, or sampled.

3. Samples must be taken, preserved, and labeled according to Division approved methods.
4. Standard environmental monitoring chain of custody procedures must be followed.
5. Samples shall be analyzed by a laboratory certified or approved by the State of Nevada, as applicable for the method(s) being performed. The Permittee must identify in all required reports the certified and approved laboratories used to perform the analyses, laboratory reference numbers, and sample dates, and for the electronic version of each report only, include all associated laboratory analytical reports, including test results, test methods, chain-of-custody forms, and quality assurance/quality control documentation.
6. The accuracy of analytical results, unless otherwise specified, shall be expressed in mg/L and be reliable to at least two significant digits. The analytical methods used must have a practical quantitation limit (PQL) equal to or less than one-half the reference value for Profile I parameters. Laboratories shall report the lowest reasonable PQL based on in-house method detection limit studies. Samples for Profile I parameters shall be filtered, digested, and analyzed for the dissolved fraction, unless otherwise required by the Division; samples requiring radiological analysis shall be unfiltered, digested (as applicable) and analyzed. Unless otherwise approved by the Division, analytical results that are less than the PQL shall be reported quantitatively by listing the PQL value preceded by the "<" symbol.

F. Permit Modification Requirements

1. Any material modification, as defined at NAC 445A.365, plan to construct a new process component, or proposed change to Permit requirements must be reported to the Division by submittal of an application for a Permit modification, or if such changes are in conformance with the existing Permit, by submittal of a written notice of the changes. The Permit modification application must comply with NAC 445A.391 through 445A.399, 445A.410, 445A.414, 445A.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 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: Shawn Gooch, P.E.

Date: 28 October 2021

Revision 00: New Permit.

FACT SHEET

(Pursuant to Nevada Administrative Code [NAC] 445A.401)

Permittee Name: **Bell Mountain Exploration Corp.**

Project Name: **Bell Mountain Mine Project**

Permit Number: **NEV2020115**

Review Type/Year/Revision: **New Permit 2021, Fact Sheet Revision 00**

A. Location and General Description

Location: The Facility is located in Churchill County entirely on public land administered by the US Bureau of Land Management, Carson City District, Stillwater Field Office, in the Fairview mining district, within portions of Sections 1-3, 10-12, and 15 of Township 15 North (T15N), Range 34 East (R34E); and portions of Sections 2, 3, 10, 11, 14, 15, 22, 23, 26, 27, 34, T16N, R34E, Mount Diablo Baseline and Meridian approximately 40 air miles east of the town of Fallon.

Site Access: From Fallon, travel east on US 50 for approximately 42 miles to Earthquake Fault Road. Turn south on Earthquake Fault Road and travel south on Earthquake Faults Road for approximately 7.5 miles to the mine entrance road.

General Description: The Bell Mountain Mine Project facilities consist of four open pit mines (the Spurr, Varga, Sphinx and East Ridge pits), two waste rock disposal facilities, a heap leach pad, an activated carbon adsorption (ACA) plant, an event pond, primary and secondary crushers, one downgradient groundwater monitoring piezometer well, a water supply well, and ancillary facilities for administrative, operational, and maintenance support. As proposed, the project has a life of up to five years and has been permitted at an ore production rate of 1,500,000 tons per year.

All facilities are required to be designed, constructed, and must be operated and closed in such a manner as to prevent discharge or release of process fluids in excess of those standards established in regulation except for meteorological events which exceed the design storm event.

B. Synopsis

History

The Bell Mountain Mine Project is located within the historic Fairview mining district. The property was discovered in 1914 and a shallow shaft was sunk. In 1916, the Spurr adit was driven below the shaft. The property was investigated again in 1948, but no production was reported. In the mid 1960's, the Lovestedt adit was driven below the Spurr adit from the west.

In 1978, American Pyramid Resources acquired the property and drove the Varga adit eastward under the Varga deposit, but did no drilling. They also drove the Sphinx adit in 1982. A feasibility study for American Pyramid was prepared in 1982, but the project did not go forward.

The property was optioned by Santa Fe Mining in 1984, which drilled exploratory reverse circulation (RC) holes, largely in the Varga deposit, and carried out heap leach metallurgical testing.

Alhambra Mines optioned the property in 1986, and drilled several underground long-holes in the Spurr deposit.

N.A. Degerstrom acquired the property in 1989 and drilled RC and core holes in the Varga, Spurr and Sphinx deposits. N.A. Degerstrom also conducted metallurgical testing, mine design work and obtained full permitting for mine operations from the Division on 25 February 1992 under Water Pollution Control Permit (WPCP) NEV0091026 as Bell Mountain Mine. Due to falling metal prices, the project was shelved.

Globex Nevada acquired the property in 1994 and optioned it to ECU Gold Mining Inc. in 1995. ECU drilled core holes in 1996, but did not continue. Platte River Gold optioned the property from Globex in 2004 and drilled RC holes. They also returned the property to Globex.

WPCP NEV0091026 expired on 24 February 1997. The Permit was not renewed and was canceled at the request of the Permittee, Globex. The record was closed by the Division on 03 October 2008.

Laurion Mineral Exploration optioned the property from Globex in 2010. Laurion drilled RC holes in the Varga and Spurr zones during the 2010 year and RC holes in the Sphinx zone in 2011.

Late in 2013, Lincoln Resource Group (Lincoln) executed a Purchase Agreement with Laurion. Lincoln conducted drilling mainly focused in the Varga area with somewhat lesser focus divided between the Spurr and Sphinx areas. In late 2014, the title to the claims on the property reverted back to Laurion via quitclaim deed.

In 2015, Boss Power Corp. (Boss) and its wholly owned subsidiary Bell Mountain Exploration Corp. (BMEC) entered into a Purchase Agreement in which Boss and BMEC acquired right, title, and interest in the property. In July 2015 Boss changed its name to Eros Resources Corp (Eros). In 2017, Eros conveyed to BMEC all of the right, title, and interest of Eros in the property. BMEC is the current Permittee.

Geology:

The Bell Mountain property lies on the east side of the Fairview Range. In the Fairview Range, the pre-Tertiary basement consists of limited exposures of Jurassic metasedimentary rocks which are cut by a Cretaceous granodiorite intrusion. These rocks are overlain by a complex series of intermediate to rhyolitic lavas, ashflow tuffs, volcanoclastic sediments and small dacitic to rhyolitic intrusive domes and dikes.

The principal rock units at Bell Mountain are stratified rhyolitic ashflow tuffs. The ashflow tuff sequence is relatively monotonous, varying only in the intensity of welding. Individual units can be broken out based on lithology, welding

features, and alteration. The geologic package consists of three surficial deposits, two intrusive units, three extrusive tuff units and features controlling mineralization at the property.

The Bell Mountain deposit has been characterized as a low sulfidation epithermal vein system. Mineralization at the property is separated into four deposit bodies – the Spurr deposit on the western end of the Varga-Spurr fault, the Varga deposit in the central part, the Sphinx deposit approximately 2,000 feet southeast of the Varga on a northwest trending structure and the East Ridge deposit on an east-northeast trending structure approximately one mile northeast of Varga. All four are composed of complex structurally controlled veins, stockworks and hydrothermal breccias.

At Bell Mountain, gold-silver mineralization is strongly structurally controlled. The primary control is an east-northeast trending zone of faulting, named the Varga-Spurr fault, which can be traced for more than 6,000 feet. The Varga-Spurr fault dips steeply to the south and has experienced normal and dextral displacement. It is offset slightly in a right lateral sense by a set of northwest trending, steeply dipping faults of similar strike length. Both fault sets have quartz-calcite veins and stockworks, gold-silver mineralization and pervasive silicification. Minor disseminated mineralization is present in silicified wallrocks. The intersection of the NE and NW vein sets, particularly in the Varga area, localized a significant volume of mineralization.

The quartz-calcite veining is primarily seen as variably intense stockwork zones of braided veins and veinlets which may be up to 130 feet wide. Within the stockwork, the dips of individual veins are highly variable, but the overall dip of the body of mineralization as a whole is nearly vertical.

The Spurr vein strikes nearly east-west, dips 45 to 55 degrees to the south and is 10 to 49 feet wide. There are several small northwest trending crossing faults which offset the vein a few meters. Calcite is the most abundant vein mineral in the Spurr deposit, with lesser amounts of quartz occurring as 0.4- to 8-inch veins concentrated near the vein walls. The calcite vein is generally strongly banded. The vein material is completely oxidized to depths of current drilling.

The Sphinx deposit contains at least two sub-parallel veins with other smaller splits which trend northwesterly. Vein and stockwork widths in the crosscuts ranged from 10 to 30 feet. Veins here are quartz with little calcite, are often banded and have a bluish tinge. Minor silicification is present, surrounded by argillic alteration, which is stronger than elsewhere on the property. The veins dip steeply toward the southwest.

The East Ridge Deposit consists of east-northeast trending quartz-calcite veins which dip steeply to the south. Quartz is the predominant vein material with lesser calcite. The width of the vein is 3 to 13 feet. The vein is exposed in outcrops and surface cuts for approximately 820 feet. The vein is cut by sparse northwest northeast trending fractures that locally host quartz-calcite veinlets and may

continue out into the hanging wall for up to 9 feet. The west and east ends of the deposit are not well defined and are interpreted as weakening sheeted veinlets and stockwork zones.

All ore and waste at Bell Mountain is oxidized; no sulfidic ore or waste have been encountered or identified during exploration drilling at the Project site.

Meteorology:

Site climate data have been obtained from the Western Regional Climate Center meteorological stations located at Desatoya Mountain. Pan evaporation data has been derived from the Central Nevada Field Lab in the Reese River Valley.

The Desatoya Mountain Station lies at an elevation similar to the Bell Mountain Mine site. Additionally, the aspect is similar to the Project. Consequently, precipitation for the two sites should be nearly the same. Annual precipitation recorded at the Desatoya Mountain RAWS station is 5.72 inches.

The average annual evaporation for the site is 62.64 inches, based on evaporation data from the Desatoya Mountain RAWS station, approximately 30 miles northeast of the Project site. Penman Potential Evapotranspiration (PET) values from the RAWS station were averaged for each month during the period January 1998 to March 2019. The Desatoya Mountain Penman PET estimates are considered comparable to the Bell Mountain site based on similar elevations and UTM northing. The Desatoya Mountain RAWS PET data was adjusted for an elevation difference of +100 feet to the elevation at Bell Mountain.

The point precipitation depths for the 24-hour 10-year, 25-year, 100-year and 500-year storm events were obtained from the National Oceanic and Atmospheric Administration (NOAA) Point Precipitation Frequency Estimates Atlas 14. According NOAA estimates, the 25-year 24-hour rainfall storm event is 2.13 inches, the 100-year 24-hour rainfall storm event is 2.77 inches, and the 500-year 24-hour rainfall storm event is 3.58 inches.

Mining:

The project will generate four pits. All waste rock and ore to be mined is oxidized; no sulfidic material has been encountered in drilling to the total depths of each planned pit or to the total depth of any drill hole. As currently planned, the Spurr Pit will extend to a depth of 255 feet from crest to toe and occupy an area of 6.8 acres. The Varga pit will have a total depth of 360 feet from crest to toe and encompass an area of 14.4 acres. The Sphinx Pit will be 180 feet total depth from crest to toe and encompass 6.6 acres. The East Ridge Pit will extend 220 feet from crest to toe and encompass a total of 6.3 acres.

A pit slope stability study was prepared to provide open pit slope design recommendations for use in mine pit planning. The recommendations for pit slope angles were used for the mineral resource model pit optimizations and pit designs. The pit slope recommendations are relatively comparable to many active open pit mining operations in the region. The Permittee will monitor pit wall stability

throughout the active life of each open pit. Geotechnical monitoring of mine high-walls and pit crest is required periodically to verify stability and to make sure that each pit is operated within geotechnical design parameters.

Ore will be mined employing conventional drilling, blasting and front-end loading into haul trucks from 20-foot (ft) blast height benches resulting in final 40-ft high double bench pit faces. The ore will be loaded into end-dump trucks for haulage to the crusher area. An average of 5,000 tons/day of ore will be mined and delivered to the crusher, and then placed on the heap leach pad as crushed ore.

The groundwater table has not been encountered in modern drilling at the mineral deposits to the limits of drilling. Drilling completed at the Varga Pit area indicates that groundwater is greater than 280 feet below the planned deepest level of the Varga Pit. No groundwater was reported in the drill hole log to its total depth. No dewatering is therefore planned, and no pit lake is expected to form at the Varga Pit.

Three rotary holes were drilled in the hanging wall of the Spurr deposit in 1965. Groundwater was encountered approximately 300 feet below the deepest level of the planned Spurr Pit. No dewatering is therefore planned, and no pit lake is expected to form at the Spurr Pit.

In December 2019, a groundwater depth test hole was drilled in the area of the planned heap leach pad nearby to the Sphinx pit. The hole was drilled to a total depth of 510 below ground surface. No groundwater was encountered to the total depth of the hole confirming that groundwater is deeper than 510 feet in the area. No dewatering is therefore planned, and no pit lake is expected to form at the Sphinx Pit.

Waste Rock Disposal Facilities:

The mine pits will generate an estimated total 3.8 million tons (2 million cubic yards) of waste rock. The waste rock disposal areas (WRDAs) were selected to minimize disturbed acreage and haulage distance. Topsoil suitable for growth medium will be scalped from the waste WRDAs footprints and removed to stockpiles and stored for use in final reclamation.

Waste rock will be deposited at the Main WRDA and the East Ridge WRDA. Initially, waste rock from the Spurr and Varga pits will be placed as fill material for haul road construction. Waste from the Sphinx Pit will be used for fill material for construction of the ACA Plant pad during initial pre-stripping of overburden. As the haul roads reach their design configuration, waste from the mine pits will be used to partially backfill the eastern portion of the Spurr Pit with the remainder hauled to the Main WRDA for disposal. As mining advances, waste from the Sphinx Pit will be hauled to the Main WRDA with the remainder used as fill material for haul roads. The last pit to be mined will be the East Ridge Pit in Year 4 of the operation. Waste from the East Ridge Pit will be disposed at the East Ridge WRDA with the remainder used as fill material for the East Ridge Haul Road.

The area set aside for waste rock disposal covers approximately 1,060,000 square feet and will be graded on all sides to maintain maximum slopes of 2.5 horizontal to 1 vertical (2.5H:1V). Stability analysis of the Main WRDA resulted in minimum static factors of safety of 1.9 during operation and 2.6 in reclaimed condition. Minimum pseudostatic factors of safety are 1.07 during operation and 1.76 in reclaimed condition.

During placement of waste rock in the Main WRDA, large portions of the facility will be at the angle of repose. However, most of the waste facility footprint will be buttressed against the opposite hillside and crusher access road fill. As the WRDA expands down gradient, waste rock from the Spurr and Varga pits will merge and form a down-gradient slope of about 2.5H:1V. Based on existing roadway fill slopes, the angle of repose of the waste rock will be approximately 40°.

Stability analysis of the East Ridge WRDA resulted in minimum static factors of safety of 1.9 during operation and 2.5 in reclaimed condition. Minimum pseudostatic factors of safety are 1.07 during operation and 1.76 in reclaimed condition.

During operations, the physical characteristics of the WRDAs will be monitored regularly by mine personnel with periodic inspection by a qualified engineer. Operations personnel will be instructed to look for unusual signs of settlement, seeps and erosion. A qualified engineer will conduct formal safety inspections using a checklist contained in the project Monitoring Plan.

During reclamation, the WRDAs will be graded to a maximum slope of 2.5H:1V, capped with a 1-ft growth media cover and revegetated.

An extensive characterization program was conducted on the waste rock using Meteoric Water Mobility Procedure (MWMP) – Profile I, Acid Neutralizing Potential: Acid Generating Potential (ANP:AGP) testing in accordance with the Nevada Modified Sobek Procedure, and humidity cell testing. A total of 75 drill intervals were sampled and composited into 35 samples for MWMP and Acid Base Accounting (ABA) testing (i.e., static testing) to assist with predicting the likely response of the Bell Mountain rock system to exposure to the weathering environment in a post- mining scenario.

The ABA testing of the 35 composite samples selected for the static testing program showed that the total AGP of all of the 35 samples was at the detection limit of 0.62 kg CaCO₃ eq/t, and the ANP ranged from 1.76 to 374 kg CaCO₃ eq/t, and averaged 25.1 kg CaCO₃ eq/t. The Net Neutralization Potential (NNP) ranged from 1.14 to 373.0 kg CaCO₃ eq/t, and averaged 24.5 kg CaCO₃ eq/t. Paste pH values ranged from 8.08 to 9.5, and averaged 8.82. The Bell Mountain rock system is acid neutralizing, not acid generating.

The MWMP testing in the static testing program indicated that aluminum, arsenic, manganese, nickel, antimony, and thallium were elements in the waste rock, ore, and the ultimate pit wall that may be mobilized briefly by the proposed action.

Most of these elements were mobilized at levels that would be anticipated from these types of rocks, and at levels no greater than those from the surrounding rocks.

During modern exploration drilling, the groundwater table was not encountered to the limits of drilling, approximately 600 feet below ground surface. The proposed four mine pits would not encounter groundwater; no pit lake formation is anticipated. With low annual precipitation and the absence of shallow groundwater associated with the Project area, implementing the proposed design features would likely preclude trace elements in mined materials and pit walls from mobilizing into the subsurface environment.

Kinetic testing consisted of five composite samples of the Lithic Tuff unit that were determined to have some of the lowest neutralization capabilities coupled with highest contributions of Constituents of Concern (COCs). During testing, one sample had to be discontinued, because it could not be evaluated accurately due to excess clays which resulted in a lack of infiltration. The discontinued sample contained stockwork quartz-calcite veinlets.

The other four samples were found to contain enough amounts of mobilized clay minerals that very fine-grained particles were mobilized. The analytical results respective to aluminum, iron, and manganese exceeded the NDEP Profile 1 reference values. Removal of the clays using finer filters prior to analysis resulted in reduction of all COCs well below the NDEP Profile 1 reference values for the final four samples.

Operational monitoring of the waste rock facilities will be done in accordance with the Permit requirements. Randomly selected locations on the surface of the WRDA will be collected monthly to determine the potential for acid rock drainage and mobilization of potential contaminants.

Heap Leach Pad:

The heap leach pad (HLP) will be constructed in two phases. Phase 1 will be the lower two thirds of the proposed HLP area (approximately 1,440,000 sq. ft.) and Phase 2 will be the upper one third of the area (approximately 808,000 sq. ft.).

The Phase 1 portion of the Heap Leach Pad will terminate at the top of a topographic peninsula oriented northeasterly approximately 1,200 feet up the pad and then will go across the pad in a northeasterly direction. The Phase 1 lining system will terminate in an anchor trench along the boundary, except in the first two valleys encountered where the lining system will be extended into the Phase 2 area to a fixed elevation to provide temporary storage of meteoric water above the pad liner. In these two areas, the liner system will terminate in an anchor trench constructed on contour at the designated elevation. This configuration will provide a lined pool where runoff will be temporarily impounded until it is drained by a 12-inch Advanced Drainage Systems (ADS) pipe that has been installed as a future solution header for Phase 2 operation. The runoff will be impounded by a temporary berm of crushed ore placed on overliner at the

upstream side of Phase 1. The temporary ore berm will be approximately 15 feet high and will be removed during Phase 2 construction and possibly be used as overliner in the transition area.

A dilute cyanide (NaCN) solution will be applied to the heap via drip emitters at a proposed rate of 600 gallons per minute (gpm) at 0.004 gallons per minute per square foot (gpm/sf). The nominal application rate of barren solution with adjusted CN levels is also 600 gpm plus estimated seasonal adjustments for evaporation. The maximum area under leach for the HLP is 150,000 square feet.

Run-of-mine (ROM) ore will be delivered by 35 to 45-ton haul trucks to a stockpile in the crushing area. Ore transported from the mining areas will be temporarily stored at the ore stockpile. The ore stockpile will be loaded by end dumping the ore onto the footprint of the ore stockpile. All ore is oxidized. Stockpiled ore will be loaded by a loader and fed into the crusher. The crushed ore will be delivered to the HLP by trucks or conveyors. A dozer will be used to manage and place the material.

Ore will be stacked on the HLP to a maximum heap height of 160 feet from toe to crest. Based on a crushed material tonnage factor of 100 pounds per cubic foot, the HLP will accommodate approximately 6.2 million tons of crushed ore.

The HLP will be constructed as a valley-fill type pad. The grading plan calls for minor cuts and fills to smooth the subgrade prior to placement of the underliner. At the southwestern end of the heap leach pad, up to 15 feet of fill will be used to flatten the grade of the pad to enhance stability. In this area, up to 3 feet of fine-grained soil may be removed and stockpiled for production of bentonite-amended soil underliner.

The HLP will have a composite liner system. The composite liner system consists of an 80-mil high density polyethylene (HDPE) geomembrane placed above a prepared 6-inch-thick amended soil/clay layer with a maximum hydraulic conductivity of 1×10^{-6} centimeters per second (cm/s) (prepared sub-base) or a geosynthetic clay layer (GCL) in accordance with NAC 445A.415 and NAC 445A.434 and related subsections.

A 24-inch-thick protective layer will be placed over the geomembrane to protect the geomembrane from damage by vehicles and/or conveyors working within the leach pad limits and/or during ore loading. The 24-inch-thick protective layer will consist of minus 2-inch crushed and screened ore or waste rock.

A network of perforated pipe is located on top of the leach pad liner within the overliner. The pipelines will promote leachate and stormwater collection and flow from the pad area to minimize solution build-up over the liner in areas of active leaching. The pipe network, drainage material, and the ore lifts have been designed to limit hydraulic head on the leach pad to less than 1-foot.

The solution collection piping consists of 4-inch-diameter perforated ADS pipes spaced on 40-ft centers. These pipes have been sized to collect and convey 100 percent (%) of the solution flow plus coincident 100-year 24-hour rainfall

concentrated in a 2-hour period. The lateral collectors transport leachate to the header pipes.

The header pipes will be constructed of 8-inch-diameter N-12 perforated ADS pipe in areas above the 1% sloping pad and 10-inch-diameter perforated ADS pipe across the 1% sloping pad.

These will then carry the solutions to the pad exit point where they discharge individually into an open tank where the flow can be observed. The discharge from the open tank will be routed to a horizontal pregnant solution tank in a HDPE pipeline. Overflow pipes will be provided for the open tank and pregnant tank so that excess flows can be routed to the event pond. Similar to the lateral pipe system, the header pipes have been sized to collect and convey 100% of the solution flow. The pregnant solution pipes convey solution to the ACA plant for processing to remove precious metals. Barren solutions are sent to the barren solution tank where cyanide and pH levels are adjusted and then returned to the heap in the barren solution pipeline with pumps.

The HLP leak detection system will consist of 1-inch diameter, Schedule 80, Poly Vinyl Chloride (PVC) perforated pipes installed in pea gravel below the primary liner under each solution collection header pipe on the pad.

At HLP closure, ore lifts placed at the angle of repose, with 30-ft wide intra-lift benches, built at an overall slope of 3H:1V, will be graded down to allow for construction of the cover system. With this design, the slope faces of the heap will be 3H:1V average.

For reclamation and closure, the HLP will be covered with growth media and revegetated. The cover system for the heap leach pad will be designed to remove water via evapotranspiration that is not removed as runoff from the system. The cover system has been selected to meet the prescribed requirement of 2 feet of growth media. The cover system for the facility would consist of the following (from top to bottom):

- Vegetation consisting of native grasses and sagebrush.
- A 2-foot-thick layer of onsite soils consisting of gravelly silty sand.
- Existing spent ore (varies in thickness).
- Existing leach pad solution collection system ADS pipes surrounded by drainage aggregate).
- Existing leach pad liner system (HDPE and amended clay soil or GCL).
- 6-inches of compacted native subgrade

HLP Seismic Stability:

An assessment was made to establish seismic parameters needed for HLP slope stability analyses.

The Fairview Fault is the closest active fault in the vicinity of the project. The closest portion of the Fairview fault trace to the HLP is about 1.3 miles (2.1 km) west of the HLP site. In 1954, there was dip-slip movement on the Fairview Fault of up to 15 feet, related to a magnitude 7.1 earthquake, which produced a fault scarp 30 miles long. The selected earthquake event recurrence interval for the estimated peak ground acceleration (PGA) was 1 in 500 annual frequency of exceedance (approximately 10% probability of exceedance (PE) in 50 years). This PGA value meets the requirements for input to the pseudo-static stability analyses for heap leach pads per the Nevada Division of Environmental Protection, Bureau of Mining Regulations and Reclamation (Division). The estimated PGA for the 10% PE in 50 years is 0.27 gravity in the central area of the proposed HLP.

The seismic stability of the reclaimed heap leach facility was reviewed for circular or planar failures of the reclaimed heap using a horizontal ground acceleration of 0.27 gravity. The minimum static factor of safety against slope failure was estimated to be 1.3 and the associated minimum pseudo-static factor of safety was found to be 1.05.

No active or recent faulting (Holocene), older Quaternary faulting, or inferred fault traces have been identified within the HLP site. Therefore, potential ground rupture from seismic activity in the area is not a concern with the HLP design and solution containment.

HLP Slope Stability

A geotechnical report was prepared to evaluate slope stability at the HLP area. Based on the findings of the geotechnical report, the downstream end of the HLP is defined by an 11-ft high stability berm constructed with compacted mine overburden. This berm has a 2H:1V upstream slope and a 3H:1V downstream slope. It divides the Phase 1 heap leach pad from the ACA plant and event pond platform.

Three smaller stability enhancement berms will be constructed approximately 250 feet upstream of the southeastern end of the heap leach pad and parallel to the downstream stability berm. These berms are approximately 5 feet high and will be constructed as compacted fills with local borrow. The upstream and downstream sides of these berms will be constructed with 3H:1V slopes.

The southwest side of the HLP is an existing hillside that has a natural slope of approximately 18 degrees (3H:1V). This slope will be reconstructed in places with fill generated from haul road construction along the southwest side of the HLP. The fills will be constructed at a 3H:1V slope. The edge of the haul road will be used to anchor the HDPE liner and will have a 24-inch high safety berm.

The operational monitoring program for the HLP will include regular visual inspection by operations personnel and measurement of significant displacement at the crest of each lift by the mine engineer. Engineering, survey, and operations staff, as well as equipment operators, will observe the facility frequently and will

be trained to look for and recognize signs of instability. The mine engineer will maintain an ongoing assessment of the accumulated data.

Solution Processing:

The Bell Mountain solution processing plans consist of an ACA process plant and an event pond. Gold bearing solution (aka pregnant solution) will be collected from the bottom of the HLP by a drainage collection system and delivered via gravity flow to the Pregnant Solution Storage Tank located in the Process Area.

The ACA Plant and sodium cyanide (NaCN) Storage Area will be housed in a laminated vinyl-insulate covered 105-ft x 80-ft Sprung fabric building on a concrete slab floor. The slab and 3 feet beyond its perimeter will be underlain at a depth of 1.5 feet by an 80-mil HDPE geomembrane and amended soil underliner. The geomembrane will be graded to drain to the Event Pond.

The pregnant solution will be pumped from the Pregnant Storage Tank to a series of five carbon-in-column (CIC) tanks, where the gold in solution will be recovered by activated carbon as the solution flows by gravity through the series of tanks. Each tank will hold approximately 3 tons of carbon. The solution flowing from the last tank in series will be non-gold bearing (aka barren solution) and will be pumped to the Barren Solution Storage Tank. The Barren Solution Storage Tank will have a nominal capacity of 6,000 gallons. Sodium cyanide will be added to the barren solution prior to the Barren Solution Storage Tank. From the Barren Solution Storage Tank, the barren solution will be pumped to the HLP for irrigation of the ore. The maximum solution flow rate for the processing plant is 600 gallons per minute.

The carbon will be moved in batches upstream through the circuit to replenish each tank as gold-rich carbon (aka loaded carbon) is removed from CIC Tank #1.

Loaded carbon from CIC tank #1 will pass through a screen before reporting to a supersac. The screen undersize water will be returned to the process. The supersacs will be allowed to further dewater within containment prior to being shipped to a third-party off-site for processing.

The platform for the ACA Plant and the Event Pond will be on a 360-ft-wide x 630-ft-long valley fill immediately downstream of the heap leach pad. The area between the HLP stability berm and the event pond will flow into the event pond. The plant site, solution tank pads, and pipeline corridors will be lined and graded to drain into the event pond for collection and return into the process circuit. These non-impounding areas will be lined with 80 mil HDPE on a single layer of GCL. An assay laboratory will also be housed within the ACA Plant structure.

Event Pond:

The 312-ft-long x 232-ft-wide x 16-ft-deep Event Pond is double lined with HDPE with a drain layer between the liners. The drain layer will either be a HDPE drainage net or HDPE drain liner which is constructed with a dimpled surface to allow drainage between the solid liners. The drainage layer will

discharge fluids to a leak detection sump in the north side of the event pond adjacent to the plant. The leak detection system will be 35-ft x 35-ft x 5-ft-deep sump in the pond consisting of pea gravel covered with geotextile. The calculated volume of the sump is 4,490 gallons assuming a 30% void space in the pea gravel. A perforated PVC pipe will be installed within gravel, and a solid PVC monitoring pipe will extend to the surface between the primary and secondary HDPE pond liners.

The calculated safe (2-ft dry freeboard) storage capacity of the Event Pond is 15.3-acre feet (ac-ft) (667,632 cubic feet). Brim-full capacity is 18.5 ac-ft (806,016 cubic feet). The full 100-year 24-hour event, totaling 2.77 inches, would generate 12.5 ac-ft (546,791 cubic feet) from the leach pad. The event pond was designed to accommodate this full inflow, while providing for 24-hour emergency draindown and 2.65 ac-ft (115,508 cubic feet) of operating fluid storage capacity.

The event pond composite-lined system will consist of the following components from bottom to top:

- Compacted fill surface.
- 80 mil smooth (or textured) HDPE geomembrane secondary liner
- Drainage layer (dimpled primary or secondary liner) or geogrid draining to leak detection sump.
- 80 mil textured HDPE primary liner with a textured side up.

Stormwater Diversion Controls:

There are three stormwater diversion channels that will be implemented prior to construction to protect the integrity of the project facilities.

The West Diversion Channel will be constructed above the northwest end of the HLP to divert surface flows during storm events from entering the leach pad. This channel will be constructed to divert a 500-year, 24-hour precipitation event (3.58 inches) around the HLP facility. The channel is small with a depth of 3.0 feet and a bottom width of 2.5 feet and will have 2H:1V side slopes. The maximum flow rate following the 500-year event is 41 cubic feet per second (cfs) and will flow at a maximum depth in the channel of approximately 1.5 feet leaving a freeboard of 1.5 feet to the top of the channel. The duration of flow following a 500-year event will be approximately 24 hours, with the period of elevated flow rates less than 4 hours.

The East Diversion Channel is predominantly a series of three natural drainages that will be diverted around the growth media stockpile and northeast corner of the plant site platform during operation. This channel will not be needed following closure because the growth media stockpile and the portion of the plant site that lies within the existing drainage will be removed with the excavated material used for cover material. A 100-year, 24-hour precipitation event (2.77

inches) will generate a maximum flow rate of 440 cfs. The duration of the elevated flow rate will be approximately 12.3 hours.

The channel will have 2H:1V side slopes and will have a depth of 6.0 feet. The alignment of the channel will be adjusted so that the bottom is in bedrock where possible to minimize riprap requirements. At predicted flow rates, the maximum flow depth will be 4.0 feet leaving approximately 2.0 feet of freeboard.

The East Diversion Channel will discharge into a stilling/detention basin immediately downstream of the plant site. This basin will reduce the peak flow rate to approximately 200 cfs during operation so that it can be passed under the Sphinx haul road in two 48-inch-diameter culverts. During closure, these culverts will be removed and the road will cross the streambed in the same location that it does now.

The Sphinx Diversion Channel involves moving the existing streambed and access road against the hillside southwest of the Sphinx Pit. The relocated channel will be a minimum of 20-ft-wide x 4.0-ft-deep. The channel will generally be excavated in the streambed alluvial material and hillside colluvium. It will be located adjacent to the Sphinx open pit and may require fill on the side nearest the pit for safety. The natural gradient of the existing streambed is 3.8% in the reach below the plant site to the Y below the location of the Sphinx pit. The velocity of flow for the 100-year event will be approximately 18.7 feet per second (ft/s) with a maximum predicted flow of 650 cfs. The velocity of flow for the 500-year event will be approximately 19.7 ft/s with a maximum predicted flow of 764 cfs.

The Sphinx Diversion Channel will accommodate a 500-year event following closure. Additional riprap may be required along the embankment between the channel and the Sphinx pit. The Sphinx Diversion Channel terminates in an existing drainage channel approximately 300 feet south of the Sphinx pit.

Ancillary Facilities:

Ancillary support for the Project includes but is not limited to a water conveyance pipeline, an administrative building, a warehouse building, a contractor's yard, 3 fueling areas on containment, and a truck wash bay facility.

Water for the mining operation and dust control will be sourced from a water well in the Stingaree Valley approximately 8 miles north of the Bell Mountain mine site. Water will be conveyed along a buried pipeline beginning at the well and traversing along a water pipeline corridor to the mine site. Water quality monitoring of the well water will be done periodically in accordance with the WPC Permit.

Above-ground diesel and gasoline fuel storage tanks will be located at the administration area, crusher/contractor's yard, and the ACA plant areas. The ground surface of the fuel storage areas will be lined with a single layer of 60-mil HDPE liner overlying prepared subbase. Spill containment will accommodate 110% of stored volume of the tanks. Operating personnel will make daily

inspections of ground conditions surrounding lined containment areas for fuel storage areas. Any fuel leak captured on the containment will flow to a sump where it will be collected and removed to a Nevada state approved disposal facility.

The wash bay, located on the Main WRDA, will be lined with 80-mil HDPE liner overlain by 18 inches of protective aggregate base rock. A 1-ft high berm will surround the perimeter of the wash bay pad. The wash bay liner will be sloped to drain to a drop inlet. From the drop inlet, water and fluids will drain along a 6-inch N12 ADS drain pipe to the lined heap leach pad. The wash bay area will also be used by contractors to perform minor vehicle maintenance.

C. Receiving Water Characteristics

The Project is primarily located within the Nevada Department of Conservation & Natural Resources-Division of Water Resources (NDWR) Hydrographic Region number 10 (Central Region), Administrative Groundwater Basin 124 (Fairview Valley).

Additionally, a small portion of the East Ridge Haul Road lying east of the East Ridge deposit is located within Basin 126 (Cowkick Valley). Groundwater Basins 124 and 126 are classified by the State Engineer as “Designated” under Order O-715 as ground water basins coming under the provisions of Chapter 534, NRS (Conservation and Distribution of Underground Waters).

The Project is located near the east side of the Fairview Valley basin which is a closed basin draining to Labou Flat lying west of Fairview Peak. Groundwater Basin 124 is typical of arid drainage basins in Central Nevada where precipitation is generally insufficient to support perennial stream flow. Small ephemeral channels begin in the higher elevations and convey water to the low valleys.

NDWR data was used to determine recorded groundwater depths within 5-miles downgradient to the Project facilities. A water test well was drilled 3.4 miles southwest and downgradient to the Project facilities, to a depth of 648 feet bgs. According to the well log the well is listed as a dry well and was abandoned. No other well logs within 5-miles downgradient were available for review.

Groundwater has not been encountered in modern drilling at the mineral deposits to the limits of drilling. In December 2019 a groundwater depth test hole was drilled in the area of the planned heap leach pad. The hole was drilled to a total depth of 510 below ground surface. No groundwater was encountered to the total depth of the hole confirming that groundwater is deeper than 510 feet in the area of the planned heap leach pad and processing facilities.

Because of the absence of groundwater at the Project area, no groundwater to a minimum depth of 510 feet below ground surface is available for water quality testing. During construction of Project facilities a monitoring hole will be drilled down gradient of the planned heap leach pad and processing facilities to serve as a groundwater detection hole. A piezometer will be installed at the maximum depth of the hole to detect any groundwater infiltration.

D. Procedures for Public Comment

The Notice of the Division's intent to issue a Permit authorizing the facility to construct, operate and close, subject to the conditions within the Permit, is being published on the Division website: <https://ndep.nv.gov/posts/category/land>. The Notice is being mailed to interested persons on the Bureau of Mining Regulation and Reclamation mailing list. Anyone wishing to comment on the proposed Permit can do so in writing within a period of 30 days following the date the public notice is posted to the Division website. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final determination.

A public hearing on the proposed determination can be requested by the applicant, any affected State or intrastate agency, or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.403 through NAC 445A.406.

E. Proposed Determination

The Division has made the tentative determination to issue the new Permit.

F. Proposed Limitations, Schedule of Compliance, Monitoring, Special Conditions

See Section I of the Permit.

G. Rationale for Permit Requirements

The facility is located in an area where annual evaporation is greater than annual precipitation. Therefore, it must operate under a standard of performance which authorizes no discharge(s) except for those accumulations resulting from a storm event beyond that required by design for containment.

The primary method for identification of escaping process solution will be placed on required routine monitoring of leak detection systems as well as routinely sampling downgradient monitoring well(s) and surface water. Specific monitoring requirements can be found in the Water Pollution Control Permit.

H. Federal Migratory Bird Treaty Act

Under the Federal Migratory Bird Treaty Act, 16 U.S. Code 701-718, it is unlawful to kill migratory birds without license or permit, and no permits are issued to take migratory birds using toxic ponds. The Federal list of migratory birds (50 Code of Federal Regulations 10, 15 April 1985) includes nearly every bird species found in the State of Nevada. The U.S. Fish and Wildlife Service

(the Service) is authorized to enforce the prevention of migratory bird mortalities at ponds and tailings impoundments. Compliance with State permits may not be adequate to ensure protection of migratory birds for compliance with provisions of Federal statutes to protect wildlife.

Open waters attract migratory waterfowl and other avian species. High mortality rates of birds have resulted from contact with toxic ponds at operations utilizing toxic substances. The Service is aware of two approaches that are available to prevent migratory bird mortality: 1) physical isolation of toxic water bodies through barriers (e.g., by covering with netting), and 2) chemical detoxification. These approaches may be facilitated by minimizing the extent of the toxic water. Methods which attempt to make uncovered ponds unattractive to wildlife are not always effective. Contact the U.S. Fish and Wildlife Service at 1340 Financial Boulevard, Suite 234, Reno, Nevada 89502-7147, (775) 861-6300, for additional information.

Prepared by: Shawn Gooch, P.E.

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Revision 00: New Permit.