

STATE OF NEVADA

Department of Conservation and Natural Resources

Division of Environmental Protection

Bureau of Mining Regulation and Reclamation

Water Pollution Control Permit

Permittee: **First Liberty Power Corp.
Fencemaker Project
7251 W Lake Mead Blvd, Unit 300
Las Vegas, NV 89128**

Permit Number: **NEV2009104**
Review Type/Year/Revision: **Renewal 2016, 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 **Fencemaker Project**, in accordance with the limitations, requirements and other conditions set forth in this permit. The Permittee is authorized to extract up to **36,500** tons of ore per year.

The facility is located on public land in Pershing County, Nevada, within Section 10, Township 26 North, Range 37 East, Mount Diablo Baseline and Meridian, approximately 49 miles southeast of the town of Lovelock.

The Permittee must comply with all terms and conditions of this Permit and all applicable statutes and regulations.

This Permit is based on the assumption that the information submitted in the application of 29 May 2009, 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 **23 June 2016**, and shall remain in effect until **03 October 2019**, unless modified, suspended, or revoked.

Signed this **8th** day of **June 2016**.



Joe Sawyer, P.E.
Chief, Bureau of Mining Regulation and Reclamation

I. Specific Facility Conditions and Limitations

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

1. Construct, operate, and close the facility in accordance with those design plans; and
2. Not release or discharge any process or non-process contaminants from the fluid management system.

B. Schedule of Compliance:

1. Prior to initiation of operations, the Permittee shall construct a bermed surge pile containment area such that:
 - i. Stormwater runoff from adjacent areas is diverted around the surge pile without entering the bermed area;
 - ii. Stormwater from within the bermed area is contained and prevented from flowing out into natural drainages;
 - iii. The base within the bermed area is to be compacted to at least 90 percent of maximum dry density (modified Proctor) to minimize infiltration of captured meteoric water.

The construction of the surge pile containment area to these specifications shall be confirmed by submittal, for Division review and approval, of a quality assurance/quality control (QA/QC) report which includes documentation of the construction and testing of the surge pile area and adjacent berms. The design and construction of the stormwater diversion berms shall be sufficient to withstand the 100-yr, 24-hour storm event.

2. By 01 July 2016, the Permittee shall submit to the Division for review and approval a plan for removal for all ore and mineralized material stored in super sacks at the JLW Ranch location near Lovelock.
3. By 31 August 2016, the Permittee shall submit to the Division for review and approval documentation that all of the mineralized material, ore, and spill material in super sacks stored at the JLW Ranch has been properly removed from the site and properly transferred to appropriate Permitted facilities within the State of Nevada or to an out of state facility. The Permittee shall notify the Division within 30 days of the completion of the removal to schedule a site inspection.
4. At least 30 days prior to restarting mining activities, the Permittee shall submit to the Division a written notice of the intention (NOI) to begin operation pursuant to Nevada Administrative Code (NAC) 445A.426. Written Division approval shall precede the restarting of mining activities.

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

1. Ore/waste rock surge pile and loading area; and
2. 2,500 gallon settling tank and 2,500 gallon clarified water tank.

D. Monitoring Requirements:

<u>Identification</u>	<u>Parameter</u>	<u>Frequency</u>
1. <u>Mined Materials</u> Ore (O), Waste Rock (WR)	MWMP ⁽³⁾ -Profile I ⁽¹⁾ and ANP/AGP ⁽²⁾⁽⁴⁾	Quarterly
2. <u>Shipments Off-Site</u> Mined Material Shipments (MMS)	Date, tons, name and WPC Permit number of destination site	Each Shipment
3. <u>Monitoring Wells</u> MW-1 (downgradient) and MW-2 (upgradient)	Profile I ⁽¹⁾ and water elevation (ft amsl and ft bgs)	Quarterly
4. <u>Mine Water Tanks</u> Settling Tank (ST)	Volume pumped from mine sump(s) (gal); Profile I ⁽¹⁾	Weekly; Annually

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:

ft amsl = feet above mean sea level; ft bgs = feet below ground surface; gal = gallons; mg/L = milligrams per liter; MWMP = Meteoric Water Mobility Procedure; ANP/AGP = Acid Neutralizing Potential:Acid Generation Potential ratio; SU = standard units; CaCO₃ = calcium carbonate; N = nitrogen; μS/cm = microSiemens per centimeter

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) ⁽⁶⁾	Zinc
Barium	Iron	Potassium	—
Beryllium	Lead	Selenium	—

- (2) When static testing⁽⁴⁾ 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⁽⁵⁾ 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.

- (3) The Meteoric Water Mobility Procedure (MWMP) shall be performed by a Nevada approved laboratory in accordance with American Society for Testing and Materials (ASTM) Method E 2242 (or the most current method).
- (4) 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, in accordance with the 2015 Update Nevada Modified Sobek Procedure.
- (5) Kinetic testing (humidity cell testing) shall be performed by a Nevada-approved laboratory, in accordance with ASTM Method D 5744-07 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⁽²⁾ 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⁽⁴⁾, a Profile I⁽¹⁾ analysis of the final leachate, all kinetic test results above, and any additional analyses required by the Division.
- (6) 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).

E. Quarterly and annual monitoring reports 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. Failure to meet a Schedule of Compliance date.

2. No chemicals may be stored at the site or used at any stage of the mining process described in this Permit.
3. Maximum allowable size of the ore/waste rock surge pile is limited to 30 feet wide by 30 feet long by 15 feet high. Stockpiling of ore or waste rock outside of the surge pile containment area is prohibited.
4. Residence time of ore on the surge pile is limited to 20 days.
5. Underground mining below the water table, as determined by direct measurement in a monitoring well, is prohibited.
6. Discharge of excess mine water without a valid discharge Permit is prohibited.
7. Presence of fluid on single-lined containment for more than 20 days is prohibited.
8. For accounting purposes, any mined material shipped off-site to the processing facility will be considered to be ore and is subject to the annual 36,500 ton limit, even if some is later returned to the mine for disposal. Any mined material which does not leave the site may be considered waste rock.
9. In the event that mining activities encounter groundwater in quantities too great to manage through its use for drilling and dust control, or by storing it in the 2,500 gal water tanks, the Permittee shall suspend mining operations immediately and notify the Division. The Permittee shall submit a corrective action plan to the Division within 30 days. Depending on the extent and nature of the water body encountered, the Division may require modification of the Permit to add monitoring of the groundwater, including the addition of monitoring wells as appropriate. If discharge of the encountered water is proposed, Division approval of a separate Permit application for the appropriate discharge will be required prior to initiation of the discharge or continuation of mining.
10. Make-up water shall be added to the 2,500 gallon clarified water tank only.
11. Mine water accumulating in the underground sump(s) shall be added to the 2,500 gallon settling tank only.
12. Ore or other mined material may not be stored, stockpiled, delivered to, or disposed of at any location within the State of Nevada that does not have a valid Permit to do so from the Division.

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

- H. The facility shall maintain an automated or manual calibrated rain gauge, which shall be monitored at least daily, to record precipitation (inches of water) every day that the site is manned. A written and/or electronic record of all daily accumulations of precipitation shall be maintained on site.
- I. The Permittee shall inspect all control devices, systems and facilities weekly. Drainage and containment systems shall also be inspected during, when possible,

and after major storm events. These inspections are performed to detect evidence of:

1. Deterioration, malfunction, or improper operation of control systems;
 2. Sudden changes in the level of the contents of any monitoring device; and
 3. Severe erosion or other signs of deterioration in dikes, diversions, or other containment devices.
- J. Prior to initiating permanent closure activities at the facility or any process component within the facility, the Permittee must have an approved final plan for permanent closure.
- K. The Permittee shall remit an annual review and services fee in accordance with NAC 445A.232 starting July 1 after the effective date of this Permit and every year thereafter until the Permit is terminated or the facility has received final closure certification from the Division.
- L. The Permittee shall 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: 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 determines good and valid cause (such as an act of God, a labor strike, materials shortage or other event over which Permittee has little or no control) exists for such revision.
2. The Permittee shall at all times maintain in good working order and operate as efficiently as possible, all devices, facilities, or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this Permit.
3. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or correct information. Any inaccuracies found in this

information may be grounds for revocation or modification of this Permit and appropriate enforcement action.

B. Reporting Requirements

1. The Permittee shall submit quarterly reports which are due to the Division on or before the 28th day of the month following the quarter and must contain the following:
 - a. Analytical results of the MWMP-Profile I and ANP/AGP testing for the materials identified in Part I.D.1, reported on Nevada Division of Environmental Protection (NDEP) Form 0190 or equivalent;
 - b. A record of all shipments off-site identified in Part I.D.2 including (for each shipment) date, number of tons, destination, and if delivered to a site within the State of Nevada, Water Pollution Control Permit number of the receiving facility;
 - c. Monitoring data and analytical results for monitoring wells listed in Part I.D.3, reported on NDEP form 0190 or equivalent;
 - d. Pumped volume data and analytical results identified in Part I.D.4 reported on NDEP form 0190 or equivalent;
 - e. 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; and
 - f. A record of releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent.

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

2. The Permittee shall submit an annual report by February 28th of each year, for the preceding calendar year, which contains the following:
 - a. Analytical results of water quality samples collected from the location identified in Part I.D.4 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 mined and shipped off site, the number of tons of waste rock returned to the mine as backfill during the year, construction and expansion activities, and major problems with the fluid management system;

- d. A table of total monthly precipitation amounts recorded in accordance with Part I.H, reported for the five-year history previous to the date of submittal;
 - e. An updated version of the facility monitoring and sampling procedures and protocols;
 - f. An updated evaluation of the closure plan using specific characterization data for each process component with respect to achieving stabilization; and
 - g. Graphs of pH, total dissolved solids (TDS), sulfate, antimony, chloride, nitrate + nitrite (as N), fluoride, zinc, and arsenic concentration (as applicable), versus time for MWMP analysis results on ore and waste rock, and water analysis from the settling tank. These graphs shall display a five-year history previous to the date of submittal. Additional parameters may be required by the Division if deemed necessary.
3. Release Reporting Requirements: The following applies to facilities with an approved Emergency Response Plan. If a site does not have an approved Emergency Response Plan, then all releases must be reported as per NAC 445A.347 or NAC 445A.3473, as appropriate.
- a. A release of any quantity of hazardous substance, as defined at NAC 445A.3454, to surface water, or that threatens a vulnerable resource, as defined at NAC 445A.3459, must be reported to the Division as soon as practicable after knowledge of the release, and after the Permittee notifies any emergency response agencies, if required, and initiates any action required to prevent or abate any imminent danger to the environment or the health or safety of persons. An oral report shall be made by telephone to (888) 331-6337 for in-State callers or (775) 687-9485 for out-of-State callers, and a written report shall be provided within 10 days in accordance with Part II.B.4.b.
 - b. A release of a hazardous substance in a quantity equal to or greater than that which is required to be reported to the National Response Center pursuant to 40 Code of Federal Regulations 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 three 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 three 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 is complete. Therefore, unless permanent closure has been completed, the Permittee shall apply for Permit renewal not later than 120 days before the Permit expires.
2. Except as required by NAC 445A.419 for a Permit transfer, the Permittee shall submit current Permit contact information described in paragraphs (a) through (c) of subsection 2 of NAC 445A.394 within 30 days after any change in previously submitted information.
3. All reports and other information requested by the Administrator shall be signed and certified as required by NAC 445A.231.
4. When ordered consistent with Nevada Statutes, the Permittee shall furnish any relevant information in order to determine whether cause exists for modifying, revoking and reissuing, or permanently revoking this Permit, or to determine compliance with this Permit.
5. The Permittee shall maintain a copy of, and all modifications to, the current Permit at the permitted facilities at all times.
6. The Permittee is required to retain during operation, closure and post-closure monitoring, all records of monitoring activities and analytical results, including all original strip chart or data logger recordings for continuous monitoring instrumentation, and all calibration and maintenance records. This period of retention must be extended during the course of any unresolved litigation.

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

D. Division Authority

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

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

E. Sampling and Analysis Requirements

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

must identify in all required reports the certified and approved laboratories used to perform the analyses, analytical methods performed, laboratory reference number, sample dates and laboratory test dates.

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 and analyzed for the dissolved fraction, unless otherwise required by the Division.

F. Permit Modification Requirements

1. Any material modification, as defined at NAC 445A.365, or plan to construct a new process component, or proposed change to Permit requirements must be reported to the Division by submittal of an application for a Permit modification, or if such changes are in conformance with the existing Permit, by submittal of a written notice of the changes. The Permit modification application must comply with NAC 445A.391 through 445A.399, 445A.410, 445A.412, 445A.414, 445A.4155, 445A.416, 445A.417, 445A.440, and 445A.442, as applicable. The construction or modification shall not commence, nor shall a change to the Permit be effective, until written Division approval is obtained.
2. Prior to the commencement of mining activities at any site within the State which is owned or operated by the Permittee but not identified and characterized in a previously submitted application or report, the Permittee shall submit to the Division a report which identifies the locations of the proposed mine areas and waste disposal sites, and characterizes the potential of mined materials and areas to release pollutants. Prior to development of these areas the Division shall determine if any of these new sources will be classified as process components and require engineered containment as well as Permit modification.
3. The Permittee shall notify the Division in writing at least 30 days before the introduction of process solution into a new process component or into an existing process component that has been materially modified, or of the intent to commence active operation of that process component. Before introducing process solution or commencing active operation, the Permittee shall obtain written authorization from the Division.
4. The Permittee must obtain a written determination from the Administrator of any planned process component construction or material modification, or any proposed change to Permit requirements, as to whether it is considered a Permit modification, and if so, what type.

5. The Permittee must give advance notice to the Administrator of any planned changes or activities which are not material modifications in the permitted facility that may result in noncompliance with Permit requirements.

Prepared by: Shawn Gooch, P.E.

Date: 3 June 2016

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