Nevada Division of Environmental Protection

Water Pollution Control Permit & Reclamation Permit
Thacker Pass Project

01 December 2021

Presented by:
NDEP – Bureau of Mining Regulation and Reclamation
I. Introduction and Meeting Purpose

II. Meeting Ground Rules and Agenda Review

III. Opening Remarks

IV. Formal Presentation by the BMRR

V. Public Comment

VI. Closing Remarks/Adjournment
What and Where is the Thacker Pass Project?
What is the Permitting Process?
What is Different from Federal (BLM) Permitting?
Contents of the Permits
Ongoing Compliance, Monitoring, and Reporting
Current Status and Next Steps
Lithium Nevada Corporation’s Thacker Pass Project is in Humboldt County, NV, on public land administered by the BLM.
Lithium Nevada Corporation’s Thacker Pass Project is located 20 miles West-Northwest of Orovada, Nevada
WHAT IS PROPOSED FOR THE PROJECT?

Facilities and Proposed Land Disturbance (Phase I):

- Open Pit Lithium Mine – 371 Acres
- Waste Rock Storage Facilities – 250 Acres
- Sulfuric Acid Plant & Processing Plant – 36.5 Acres
- Clay Tailings Storage Facility – 364.6 Acres
- Other Facilities (Roads, Stockpiles, Administrative Buildings, Power Lines, Water Supply etc.) – 2122.4 Acres

Total Proposed Land Disturbance (Phase I): 3144.5 Acres
MINING WATER POLLUTION CONTROL PERMIT

PERMITTING PROCESS

The Permitting Process Generally Consists of:

- Administrative Completeness Review
- Technical Review
- Draft Permit and Public Notice
- Public Comment Period (30 Days)
- Public Hearing
- Comment Review
- Notice of Decision Regarding Issuance of Permit
**MINING WATER POLLUTION CONTROL PERMIT**

**WHAT’S THE TIMELINE?**

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 3, 2020</td>
<td>Application Submitted</td>
</tr>
<tr>
<td>July 17, 2020</td>
<td>Application Deemed Administratively Complete</td>
</tr>
<tr>
<td>July 17, 2020</td>
<td>Technical Review Begins</td>
</tr>
<tr>
<td>October 2020 – October 2021</td>
<td>Technical Questions Issued to Applicant; Technical Questions &amp; Responses Continue with Additional Requests for Information and Responses from Lithium Nevada.</td>
</tr>
<tr>
<td>October 2021</td>
<td>Technical Review Complete; Permit and Fact Sheet Drafted</td>
</tr>
<tr>
<td>October 28, 2021</td>
<td>Draft Permit and Public Notice Issued 30-Day Public Comment Period Begins</td>
</tr>
<tr>
<td>December 1, 2021</td>
<td>Public Hearing</td>
</tr>
<tr>
<td>December 16, 2021*</td>
<td>Notice of Decision Regarding Permit Issuance</td>
</tr>
</tbody>
</table>

*Tentative*
MINING RECLAMATION PERMIT

PERMITTING PROCESS

Reclamation Permits are not Issued for Projects on Federal Land Prior to Issuance of the Federal Decision. On Federal Land, the Permitting Process Generally Consists of:

- Completeness Review, Cost Estimate Review, & Notification of Additional Information Required
- Draft Permit and Public Notice
- Public Comment Period (30 Days)
- Public Hearing
- Comment Review
- Notice of Decision Regarding Issuance of Permit

Not Required for Projects on Public Land but Initiated for Thacker Pass Due to Public Interest
### Mining Water Reclamation Permit

**What’s the Timeline?**

<table>
<thead>
<tr>
<th>Timeline for Thacker Pass Lithium Mine Rec Permit App</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 9, 2018</td>
</tr>
<tr>
<td>August 2, 2019</td>
</tr>
<tr>
<td>November 4, 2019</td>
</tr>
<tr>
<td>January 23, 2020</td>
</tr>
<tr>
<td>December 29, 2020</td>
</tr>
<tr>
<td>March – October 2021</td>
</tr>
<tr>
<td>October 28, 2021</td>
</tr>
<tr>
<td>December 1, 2021</td>
</tr>
<tr>
<td>December 16, 2021*</td>
</tr>
</tbody>
</table>

*Tentative*
**Differences Between State and Federal Permitting**

**WPCP Does Not Authorize Mining Below the Water Table:**
- Restricted to 15 Feet Above Regional Water Table (4,840 feet amsl)
- Ongoing (Monthly) Verification of Water Level & Demonstration of Compliance
- Installation and Monitoring of at least two 300-foot deep piezometers drilled two years in advance of the current mining panel.

**Reclamation Cost Estimate (RCE) for Phase I Updated to Include Costs for Plant Demolition, Decontamination, and Disposal of Unused Reagents**

RCE = Approx. $47,596,000
Clay Tailings Filter Stack

Leak Detection
• Buried channel conveys potential leaks to the Reclaim Pond
• Shallow piezometers monitor solution present above the water table

Filtration and Drainage
• Additional tailings data required to ensure appropriate filtration and drainage

Containment Requirements for all Mined Materials and Runoff
• Stockpiles of all mined materials have a compacted soil base
• Conveys infiltration and runoff to HDPE-lined ponds
• The capacity of the ponds were increased from the 2-year event to 100-year event.
What Can You Expect to See in the WPC Permit?

- General Facility Description and Location
- Schedule of Compliance
- List of Fluid Management Systems:
  - Clay Tailings Filter Stack
  - Leak Detection Systems
  - Ponds
  - Waste Rock Storage Facilities
  - Stockpiles
  - Sulfuric Acid Plant & Process Plant
  - Other Fluid Conveyance (Pipes, Valves, Pumps, etc.)

Monitoring and Reporting Requirements

- Permit Modification Requirements
- Other Permit Requirements, Conditions, and Limitations
- Accompanying Fact Sheet

Note: The WPCP is a Zero Discharge Permit and does not authorize release or discharge of any contaminants from the mine that have the potential to degrade waters of the State.
List of Permitted Disturbances (Acres of Land and Type)

Permit Limitations

Requirement to Post Adequate Surety per Joint Agency Review

Requirement to Update RCE Every Three Years

Schedule of Compliance

## CONTENTS OF THE MINING RECLAMATION PERMIT

### Disturbance Table

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Phase 1</th>
<th>Subsequent Phases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Previous Authorizations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kings Valley Lithium Exploration Project</td>
<td>28.0</td>
<td>-</td>
<td>28.0</td>
</tr>
<tr>
<td>Kings Valley Clay Mine</td>
<td>1.8</td>
<td>-</td>
<td>1.8</td>
</tr>
<tr>
<td>Quinn River Valley Test Wells NOI</td>
<td>1.0</td>
<td>-</td>
<td>1.0</td>
</tr>
<tr>
<td>Far East NOI</td>
<td>0.2</td>
<td>-</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mine Pit</td>
<td>371.1²</td>
<td>728.7</td>
<td>1099.8</td>
</tr>
<tr>
<td>West Waste Rock Storage Facility</td>
<td>153.6</td>
<td>7.1</td>
<td>160.7</td>
</tr>
<tr>
<td>East Waste Rock Storage Facility</td>
<td>96.4</td>
<td>40.8</td>
<td>137.2</td>
</tr>
<tr>
<td>Mine Facilities, Run-of-Mine Stockpile, Attrition Scrubbing</td>
<td>48.3</td>
<td>-</td>
<td>48.3</td>
</tr>
<tr>
<td>Coarse Gangue Stockpile</td>
<td>264.0</td>
<td>54.3</td>
<td>318.3</td>
</tr>
<tr>
<td>Processing Facility (Lithium &amp; Sulfuric Acid Plant)</td>
<td>36.5</td>
<td>518.8</td>
<td>555.3</td>
</tr>
<tr>
<td>Clay Tailings Filter Stack</td>
<td>364.6</td>
<td>801.5</td>
<td>1166.1</td>
</tr>
<tr>
<td>Mine Facilities, Power Line, Quinn Power Line &amp; Water Supply</td>
<td>269.8</td>
<td>-</td>
<td>269.8</td>
</tr>
<tr>
<td>Exploration</td>
<td>150.0</td>
<td>-</td>
<td>150.0</td>
</tr>
<tr>
<td>Roads</td>
<td>124.6</td>
<td>48.6</td>
<td>173.2</td>
</tr>
<tr>
<td>Ponds</td>
<td>53.4</td>
<td>16.6</td>
<td>70.0</td>
</tr>
<tr>
<td>Growth Media Stockpiles</td>
<td>95.1</td>
<td>-</td>
<td>95.1</td>
</tr>
<tr>
<td>Inter-Facility Disturbance³</td>
<td>1086.1</td>
<td>184.1</td>
<td>1270.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3144.5</td>
<td>2400.5</td>
<td>5545.0</td>
</tr>
</tbody>
</table>
Ongoing Compliance, Monitoring & Reporting

**Quarterly Inspections**
- Verify Field Conditions
- Construction & Disturbance QA/QC
- Waste Rock & Tailings Placement
- Housekeeping & Evidence of Spills
- Condition of Containments & Chemical Storage
- Success of Reclamation & Vegetation
- Processing Facility Operations

**Ongoing Compliance Monitoring**
- Quarterly Groundwater Sampling
- Weekly Leak Detection Monitoring
- Ore and Waste Sampling
- Reported to NDEP Quarterly

**Enforcement for Noncompliance**
- Work Plans to Remediate Issues
- Fines & Penalties
- Permit Revocation
Current Status
• Based on information provided, the BMRR has determined that the facility will meet all applicable requirements for the WPC and Reclamation Permits

What Happens Next?
• The BMRR must respond to comments received
• Review permit language/conditions as applicable
• Issue / Deny
Comments

Ways to comment:

Raise Your Hand – Click the Icon on your Screen

Email: ndepthackerpass@ndep.nv.gov

Contact:
Bureau of Mining Regulation and Reclamation
| 775-687-9400 |
ndepthackerpass@ndep.nv.gov
ndep.nv.gov