



## Mining and Processing

### Thacker Pass Utilizes Technology and Equipment That Have Been Proven for Decades

The Thacker Pass demonstrated flowsheet is built on commonly used mining and chemical processes. Our Lithium Technical Development Center in Reno, Nevada has been producing battery-quality lithium carbonate samples from Thacker Pass ore.

Scan for an in depth overview of the flowsheet



#### BENEFICIATION PROCESS

- LAC's Lithium Technical Development Center processed battery-quality lithium carbonate from Thacker Pass ore using a **full-sized hydrocyclone to mitigate scale-up issues**
- Same beneficiation used in the Florida phosphate fertilizer industry
- Clay dewatering utilizes standard mining operations

#### CHEMICAL PROCESS

- Standard hydrometallurgical processes**
- Intermediary chemical produced: lithium sulphate; same as hard-rock (spodumene) operations**
- Same process currently utilized globally** to convert lithium sulphate to battery-quality lithium carbonate; **same process as hard-rock (spodumene)**
- The  $\text{Li}_2\text{CO}_3$  and  $\text{MgSO}_4$  process designs were guided by Dr. Genck<sup>(1)</sup> who has consulted with over 300 companies

#### Thacker Pass Flowsheet Process Steps:

##### 1 Mineral Beneficiation

- Crusher
- Hydrocyclones/ Hydraulic Classifier
- Attrition Scrubber

##### 2 Clay Dewatering

- Thickener
- Centrifuges

##### 3 Traditional Hydrometallurgy

- Neutralization / Counter current decantation (CCD) Washing / Filtration
- Acid Leaching

##### 4 Standard Chemical Process

- $\text{MgSO}_4$  (Epsom salts) Crystallization

##### 5 Standard $\text{Li}_2\text{CO}_3$ Process

- Magnesium & Calcium Precipitation
- Ion Exchange
- $\text{Li}_2\text{CO}_3$  Crystallization
- Drying

### Limiting Environmental Impacts

- Co-located sulfuric acid plant reduces the number of trucks on the road as each ton of sulfur can create three tons of sulfuric acid, and sulfur is much safer to transport
- Sulfuric acid production produces steam which will generate carbon-free power for the processing plant
- Block mining with active reclamation
- Shallow pit (less than 400 ft deep)
- Mineralized soft clay, minimal blasting expected
- Neutralized clay tailings are pressed into filter cakes, maximizing water recycling efforts
- Filtered dry-stacked tailings
- Co-located power generation and hydropower from the grid limits Scope 1 and 2 carbon intensity
- High recycle rate (+80%) in closed-loop, zero liquid discharge facility eliminates discharge of industrial wastewater into the environment
- Any water withdrawn for Thacker Pass is expected to be reused an average of 7x within the production process

## Mine Operator—Sawtooth Mining

In 2019, we entered into a mine design, consulting and mining operations agreement with Sawtooth Mining, a NACCO Natural Resources company, who will have design, construction, operation, maintenance, mining and mine closure services for Thacker Pass.

They have over 65 years of surface mining experience and currently operate seven surface mines in similar deposits. They have strong safety records and manage reclamation for over 200,000 acres under regulatory

permits. Their extensive reclamation history has earned them 99 federal and state awards in the last 45 years.

This mutually beneficial agreement provides Lithium Americas with deep mining experience and expertise, and is expected to provide job opportunities to the local available workforce.

**Thacker Pass will be mined in blocks, once one block is mined to the bottom (<400 feet), mining will move to the next block while backfilling begins in the previously mined area. Block mining allows us to concurrently reclaim the land while mining still occurs. The backfilled pit would then be capped with growth media that was recovered at the beginning of construction and revegetated with native species.**

## Reclamation and Closure Planning

In designing Thacker Pass, we planned for closure well before we started construction in early 2023. Our approach to mine closure carries on throughout the life cycle of the mine. We create closure plans grounded in our principles—ensuring safety and stability, promoting socioeconomic transition and contributing to risk mitigation.

For Thacker Pass, plans are in place to initiate reclamation at the earliest economically and technically feasible date on portions of disturbed areas that are no longer required for operations. This early initiation of concurrent pit backfill and concurrent site reclamation will stabilize soil, reduce dust and naturalize runoff.

As of January 2024, the topsoil from the processing plant area has been cleared and moved into stockpiles, which have been contoured to blend in with the surrounding area and will be seeded with native grasses. This will ensure the original soil is available for reclamation purposes.



## Cautionary Statements Regarding Forward-Looking Statements

This document should be read in conjunction with Lithium Americas Corp.'s news releases, latest Annual Report on Form 10-K, any subsequently filed Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, technical reports and other disclosures available on our website at [www.lithiumamericas.com](http://www.lithiumamericas.com) or on SEDAR+ or EDGAR, as applicable. This document contains "forward-looking information" within the meaning of applicable Canadian securities legislation, and "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are based on our current expectations. We believe that our current expectations are based on reasonable assumptions; however, no assurance can be given that such expectations will prove to be correct. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law. Scientific and technical information in this document about the Thacker Pass Project has been reviewed and approved by Rene LeBlanc, the Company's Chief Technical Officer and a qualified person under National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"). Further information about the Thacker Pass Project, including a description of key assumptions, parameters, methods and risks, is available in the independent NI 43-101 technical report entitled "NI 43-101 Technical Report on the Thacker Pass Project Humboldt County, Nevada, USA," available on SEDAR+ and the independent S-K 1300 technical report entitled "S-K 1300 Technical Report on the Thacker Pass Project Humboldt County, Nevada, USA," in each case dated effective December 31, 2024.

All figures presented are in US Dollars unless otherwise noted.

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