

# Kings Mountain

All the elements of a lithium ecosystem

The Kings Mountain, North Carolina, site represents Albemarle's mine-to-market strategy, encompassing all elements of the lithium ecosystem needed to power everything from consumer electronics and electric vehicles to life-saving medical devices. The site sits on one of the richest spodumene ore deposits in the world and is one of the most sophisticated sites for advanced lithium material development.

## **PROPOSED MINE**

The Kings Mountain Mine operated from 1937 until it was idled by its previous owner in the 1990s to focus on more cost-effective brine deposits in Chile. Kings Mountain joined Albemarle as part of its acquisition of Rockwood Holdings in 2015.

With the growing demand for lithium, Albemarle is pursuing a potential restart of production from the mine to strengthen our domestic supply of critical minerals. Once operational, the mine is expected to produce approximately 420,000 tons of lithiumbearing spodumene concentrate per year. To provide an idea of the scale, that amount of material would support the initial manufacturing of approximately 1.2 million electric vehicles annually.

## LITHIUM CONVERSION FACILITY

As one of a few global producers, Albemarle is building the U.S.'s lithium conversion capacity with facilities operating in Silver Peak, Nevada and Kings Mountain.

The Kings Mountain Lithium Conversion Facility produces 5,500 tons of lithium compounds annually that are used to manufacture materials that go into products we use every day, such as:

- Lithium hydroxide
- Pharmaceutical grade and high-purity lithium carbonate
- Battery-grade lithium metal products
- Lithium alloy powders

#### **HIGH IMPACT INNOVATION**

As the world continues to electrify, Albemarle is pioneering technologies that will drive greater energy density to support reduced battery weight and volume and increase range.

In Kings Mountain, Albemarle operates one of the world's most advanced lithium material sites, offering process technology and development, and a state-of-the-art research and development center, featuring a world-class facility for battery materials synthesis and testing.

## **Key Numbers About the Kings Mountain Site**



1,200

acres of advanced lithium material development



57,000

square feet of research & development space



260+

employees and contractors



\$2M +

in local community giving since 2016



1,000

potential mine construction jobs

## A CRITICAL PART OF A DOMESTIC ECOSYSTEM

The Southeast region of the U.S. is home to a growing battery ecosystem. There are national security interests that factor into this vision for domestic battery resources—for example, lithium-ion batteries are used by the U.S. Defense Department for satellites.

Today, demand for lithium-ion batteries is accelerating at an exciting pace, driven in large part by increasing global demand

for electric vehicles, mobile devices and grid storage. Kings Mountain will be a crucial building block of advanced battery technology for clean energy, sustainable transportation and lithium compounds. These are essential markets intended to improve our quality of life by reducing air pollution, promoting electric mobility, enabling portable medical device and advancing renewable energy. At the heart of it all is lithium.



The Kings Mountain Lithium Conversion Facility: this facility transforms essential lithium resources into critical ingredients for mobility, energy, connectivity and health.

## **Product End Uses**



**Electronics** 



**EV Batteries** 



Lubricants



**Pharmaceutical** 



**Grid Storage** 



**Specialty Glass** 



**Medical Devices** 



CO, Absorption



## ENABLING A MORE RESILIENT WORLD FOR PEOPLE AND PLANET

- Albemarle works diligently toward its goal of ensuring that its mining operations align with IRMA (International Responsible Mining Association) standards—the most comprehensive global mining standards focused on community and aboriginal engagement, environmental stewardship and mining best practices.
- Our ISO 9001 certification—a globally recognized standard for quality management—reflects our commitment to meeting customer needs and regulatory requirements.
- We are proud to participate in the UN Global Compact, adopting its nine Sustainable Development Goals.

 $Further\ information\ is\ available\ in\ Spanish\ upon\ request\ or\ at\ albemarlekings mountain.com$ 

For more information or to provide community feedback on the project:
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Albemarle leads the world in transforming essential resources into critical ingredients for mobility, energy, connectivity and health. We partner to pioneer new ways to move, power, connect and protect with people and planet in mind, enabling a more resilient world. Our global headquarters is approximately 35 miles from Kings Mountain in Charlotte, NC.

