

The Kings Mountain Mine Project Overview

The Kings Mountain site is one of the few known hard-rock lithium deposits in the U.S. and is expected to play a critical role in growing the U.S. supply chain of lithium. Redevelopment of the mine site is anticipated to be a significant building block to support energy security, grid storage, sustainable transportation and national defense applications.



The Kings Mountain Mine project is approximately 1,200 acres bisected by Interstate 85 (I-85) with the larger parcel on the highway's northern side and a smaller parcel south of the interstate.

PROJECT AT A GLANCE

Albemarle is seeking permits from local, state and federal agencies to resume open pit mining and expand the existing mine footprint, which was idled in the early 1990s. The permitting process began with initial permit submissions in mid-2024 and is ongoing.

After permit approvals are secured, open pit mining is expected to be used to deepen and expand the current mine pit to the southwest. The existing rock and soil will be drilled, blasted and loaded into haul trucks and hauled to various destinations at the mine site. Any rock that does not contain lithium-bearing spodumene ore will be separated and stored at on-site rock storage facilities or repurposed for

other uses. A portion of the rock that can be used for construction aggregate production is anticipated to be transported to the Martin Marietta quarry, adjacent to the mine.

Ore is planned to be conveyed to the on-site mineral processing facility at an average rate of ~3.1 million tons per year (~8,900 tons per day). At the mineral processing facility, the valuable lithium-bearing minerals (spodumene) are separated from the non-valuable minerals to obtain coarse and fine spodumene concentrate. The spodumene concentrate is expected to be transported by truck and/or rail to an offsite conversion plant at a rate of approximately 420,000 tons per year.

ECONOMIC BENEFITS

Based on the preliminary estimates, the Kings Mountain Mine is expected to provide a considerable positive economic impact to the surrounding community, region and state during the construction and operations phases. The project is anticipated to generate approximately 1,000 jobs during the mine's construction and more than 300 full-time, highly skilled jobs once the mine is operational.

Albemarle is committed to supporting health, social services and educational and cultural initiatives that strengthen Kings Mountain and surrounding communities. Since 2016, Albemarle has provided over \$3 million of funding to community initiatives in the region.

The Kings Mountain Mine Project Plan

The plan considers the sequence of events, or mining phases, throughout the entire mining process. Albemarle is currently seeking to permit the initial 10 years of mining operations.



PREDEVELOPMENT ACTIVITIES

- Mine pit dewatering
- Re-routing utilities around/into the site
- Site grading



CONSTRUCTION

- Duration of 2.5 years
- Construction of surface mine facilities, material stockpiles, mine services infrastructure, and mineral processing and water treatment plants
- Open pit development mining with only minor mining and stockpiling of ore
- Test ore processing in mineral processing facility



OPERATIONS

- Duration of 9 years
- Open pit mining of ore and rock
- Rock hauling to Martin Marietta quarry
- Mineral processing facility operations
- Transporting spodumene concentrate and tailings offsite via rail or trucks



MINE CLOSURE ACTIVITIES

- Removal or reclamation of all surface mine facilities
- Transporting rock to the pit as backfill
- Activities identified in the mine closure plan

Frequently Asked Questions

WHY LITHIUM?

Today, demand for lithium-ion batteries is growing at an exciting rate, driven in large part by increasing global demand for electric vehicles, mobile devices, and grid battery storage. We see these as essential markets intended to improve our quality of life by reducing air pollution, promoting electric mobility, enabling portable medical devices and advancing the energy transition.

WHAT IS THE TIMING FOR THE PROPOSED KINGS MOUNTAIN MINE PROJECT?

There are many variables in a project of this size making it difficult to pinpoint exactly when the mine will be operational.

Albemarle anticipates that the permitting process is expected to take about two years from when initial permits were submitted in mid-2024.

An economically viable mine could potentially have a mine life of 20–30 years. Albemarle has submitted permits that consider the initial 10 years of mining operations.

WHAT MEASURES IS ALBEMARLE TAKING TO ENSURE THE HEALTH AND SAFETY OF KINGS MOUNTAIN RESIDENTS, WILDLIFE AND THE PRESERVATION OF NATURAL AREAS BEFORE, DURING AND AFTER THE ACTIVE MINING PERIOD?

Albemarle has conducted environmental studies at the Kings Mountain site to identify and predict potential risks, such as impacts to water, wetlands, wildlife, visual aesthetics, noise, air and proposed land use. Based on these findings, site-specific measures can be incorporated into the mine design.

IS THIS PROJECT CONNECTED TO OTHER LITHIUM MINING PROJECTS IN THE AREA?

No, Albemarle's Kings Mountain Mine is a separate initiative from other proposed lithium mining projects in the area.

HOW WILL THIS PROJECT IMPACT THE EVERYDAY LIVES OF RESIDENTS?

Albemarle is taking steps to resume mining operations at the site in an environmentally protective and socially responsible way. For the proposed Kings Mountain Mine, Albemarle will include measures for social impacts such as visual impact reduction, dust suppression, noise mitigation and community giving programs.

Albemarle plans to continue to seek community input throughout the mine life, including completing a voluntary Environmental and Social Impact Assessment (ESIA) to better understand and to develop environmental and social management plans that are designed to minimize adverse impacts and enhance benefits from the mine.

WILL THIS AFFECT THE GATEWAY TRAIL?

Yes. A section of the current trail is expected near the potential extraction area once the mine construction and operations have begun. Albemarle continues to participate in planning discussions with city, county and state officials to develop a plan for a new section of the Gateway Trail. We are committed to conserving and enhancing the Gateway Trail experience for all users.

WHAT KIND OF SUPPORT HAS THE PROJECT RECEIVED FROM THE U.S. GOVERNMENT?

In 2023, the U.S. Department of Defense awarded a grant for Albemarle to help support the expansion of domestic mining and the production of lithium for the nation's supply chain. The funding will support a portion of the cost to dewater the existing pit, develop rock storage areas, site engineering and preparation as well as the purchase of some mine equipment.

In 2023, Albemarle was awarded a grant from the U.S. Department of Energy to expand domestic manufacturing of batteries, by designing, engineering and building a processing plant. Funding is intended to support a portion of the anticipated cost to construct a new, commercial-scale U.S.-based lithium mineral processing facility at Kings Mountain. Albemarle will use a portion of the grant to support mineral processing training and apprenticeship programs at Cleveland Community College, a minerals lab research program at Virginia Tech, and minerals pilot plant program at North Carolina State University's Asheville Minerals Research Lab.

WHAT IS THE GEOPOLITICAL IMPORTANCE OF THIS TYPE OF PROJECT?

Albemarle, headquartered in Charlotte, NC, operates the only producing lithium resource in the United States with Silver Peak, Nevada.

The proposed Kings Mountain Mine project is expected to provide a domestic source of lithium to meet the U.S.'s growing demand for this critical mineral.

HOW DO I CONTACT ALBEMARLE IF I HAVE A QUESTION OR CONCERN ABOUT THE PROPOSED PROJECT?

Visit our Project Center

129 W. Mountain Street in Kings Mountain from 9:00 a.m.– 4:00 p.m. Tuesdays, Wednesdays and Thursdays to ask questions and schedule a tour.

Call us 704-734-2775.

Visit our website

www.albemarlekingmountain.com and submit your questions or concerns via the Contact Us button.

Further information is available in Spanish upon request or at albemarlekingsmountain.com

For more information or to provide community feedback on the project:

Email: kmcommunity@albemarle.com | Phone: 704-734-2775 | Website: albemarlekingsmountain.com

Mail or In-person: 129 West Mountain Street, Kings Mountain, NC 28086

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.

