

# Kings Mountain Mine Project Plan



The Kings Mountain Mine project plan includes a site layout and the primary physical features and a general sequence of events for development of the proposed mine. The plan includes information about the mine's pit, rock storage facilities, hauling roads, tailings and other infrastructure.

## PROJECT OVERVIEW

Albemarle is seeking permitting approval to resume open pit mining and expand the mine footprint of the Kings Mountain Mine. First, the existing open pit must be dewatered as the pit has filled with rainwater since operation was curtailed in the 1990s. Pit dewatering requires its own permitting and community engagement process and is expected to take 18–24 months to complete.

After permit approvals are secured, Albemarle expects to use open-pit mining to deepen and expand the current mine pit to the southwest. The existing rock and soil will be drilled, blasted and loaded into trucks and hauled to various destinations at the mine site. Rock that does not contain lithium-bearing spodumene ore will be separated and stored at on-site rock storage facilities (RSFs) or repurposed for other uses. A portion of the rock that can be used for construction aggregate production is expected to be transported to the adjacent Martin Marietta quarry.

Ore will be hauled by truck to the run-of-mine (ROM) pad used to feed the on-site mineral processing facility at an average rate of ~3.1 million tons per year (~8,900 tons per day). Albemarle intends to subsequently transport the spodumene concentrate by truck and/or rail to an offsite conversion plant at the rate of approximately 420,000 tons per year.

Tailings from the spodumene concentrate process are expected to be transported to an off-site tailings storage facility (TSF).

## PRIMARY ELEMENTS OF THE PROPOSED MINE SITE:

- Redevelopment of the open pit mine
- Two onsite rock storage facilities
- Mineral processing plant and supporting infrastructure
- Mine services infrastructure
- Transfer of materials to the Martin Marietta quarry
- Tailings storage facility
- Three material stockpiles to store soil and weathered rock



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.

## Mine Sequence and Activities

The plan considers the sequence of events, or mining phases, throughout the entire mining process. Albemarle is submitting a permit initially for 10 years of operation.



### RESPONSIBLE MINING

Albemarle expects to meet all regulatory requirements and implement environmental protection measures (EPM) to minimize potential impacts on the community such as assessing threatened and endangered species surveys, flora/fauna impacts, visual impacts, dust suppression, noise mitigation and traffic studies.

During the mine pre-planning phase, Albemarle is also undertaking an Environmental and Social Impact Assessment (ESIA) process to identify and assess the potential environmental, social, health and safety impacts that could occur because of the development, operation and closure of the mine.



**Albemarle's mine project plan is developed through extensive research and analysis of the site by project engineers and scientists.**

Further information is available in Spanish upon request or at [albemarlekingsmountain.com](http://albemarlekingsmountain.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.

