clean AIRE nc

Protecting what connects us

POLLUTANT: LITHIUM MINING

Lithium is a key component in reusable batteries, which are used in anything from electric vehicles to portable electronics like phones, to energy storage. **Unfortunately, the process of extracting lithium has significant consequences for human and environmental health.**

Lithium Extraction

Brine Mining pumps saltwater into the earth to create a brine, which is collected in storage pits.The water is then allowed to evaporate away. **Hard Rock Mining** uses traditional mining techniques to collect ore deposits. Most of the lithium extracted in North Carolina uses hard rock mining.

Every ton of lithium from brine mining = 11 tons of CO_2 emissions

Every ton of lithium from hard rock = 37 tons of CO_2 emissions

Air Pollution

Mining operations and their associated diesel machinery can emit dust, particulate matter (PM), nitrous oxides (NO_x), and sulfur dioxide (SO_2), causing serious health problems such as:

Respiratory Damage

Cardiovascular Disease

Cancer

Groundwater Pollution

Heavy metals from the mining process contaminate groundwater and soil.

Quality of Life

Pit mines cause deforestation and soil erosion, decreasing the land's cultural value.

Piedmont Lithium plans four pit mines in Gaston County, NC

The mines are set to begin production in 2026, yielding an estimated 30,000 tons of lithium annually. The project will use hard rock mining techniques, which have a significantly higher CO_2 footprint than alternatives.