

**Carolina Lithium** 

## CAROLINA LITHIUM – INTEGRATED LITHIUM PROJECT

### CAROLINA LITHIUM: PROPOSED INTEGRATED PROJECT

- 1548-acre project site
- ~3600 acres total owned/leased/contracted
- Construction target: 2025<sup>1</sup>
- First production target: 2027<sup>1</sup>
- 30,000 MT/yr lithium hydroxide capacity
- Nearly twice current total U.S. production capacity of 17,000 MT/yr – from Albemarle (Kings Mountain) + Livent (Bessemer City)

Spodumene concentrator facility

2







Lithium hydroxide conversion facility

Nasdag : PLL ASX : PLL

1 subject to permitting, rezoning, and financing

#### **CAROLINA LITHIUM: PROPOSED INTEGRATED PROJECT**



Nasdag : PLL MAS



3

#### **CAROLINA TIN-SPODUMENE BELT: SIGNIFICANT U.S. RESOURCE**



1 2019 U.S. Geological Survey data

Most significant known spodumene resource in the U.S. in size and infrastructure.

- Once provided nearly all the world's lithium
- 1950s-1980s, was critical to the U.S. military, automotive, glass, ceramics, & pharmaceutical industries
- The Carolina Tin-Spodumene Belt may contain more than 3x the current known spodumene lithium reserves in the U.S.<sup>1</sup>
  - Only 20% commercially explored
- Albemarle to restart Kings Mountain mine



#### CAROLINA LITHIUM: EXPECTED ECONOMIC IMPACT



5

Nasdaq : PLL (CASX : PLL

PIEDMONT

#### **COMMUNITY DEVELOPMENT AGREEMENT – COMMITMENTS**



#### **PIEDMONT LITHIUM STUDIES AND RESOURCES**

- Acid Base Account (ABA) and Toxicity Characteristic Leaching Procedure (TCLP) Tests
- Archaeological Survey
- Aquifer Drawdown Test
- Blasting Impact Study
- Carolina Lithium Mineral Resource Estimate
- Environmental Justice Snapshot
- Evaluation of Mine Pit Operations on Water Quality
- Federal and State Threatened and Endangered Species Survey
- Floodplain No Rise Study
- Geotechnical Survey
- Humidity Cell Testing (Accelerated Weathering of Solid Materials Using a Modified Humidity Cell)
- Phase I Cultural Resource Survey
- Leachate Environmental Assessment Framework (LEAF) Testing
- Noise Study
- Road Abandonment Survey
- Stream Flow Study
- Technical Report Summary Carolina Lithium Project
- Toxicity Testing of Lithium Hydroxide Conversion Tailings
- Traffic Impact Analysis Scoping Report
- U.S. Army Corps of Engineers Statement of Findings Environmental Assessment

- Wastewater Characterization
- Waste Rock and Process Tailings Geochemical Assessment
- Water Quality Testing
- Wastewater Treatment Process Considerations
- Connaughton, J. (2022). Economic impact of the proposed Carolina Lithium project.
- Gaston County Public Health, & University of North Carolina Charlotte. Gaston County Water Map.
- National Mining Association. (2019).
- National Transportation Safety Board data. (2020)
- North Carolina Department of Commerce. (2023).
- NCDEQ Division of Energy, Mineral and Land Resources. (2023). *An Overview*. North Carolina Mineral Resources.
- Sanford Holshouser Economic Development Consulting LLC, & Research and Consulting, LLC. (2022, March). Economic-Fiscal Impact Estimate Report: Piedmont Lithium.
- The White House. (2023). Fact Sheet: Biden-Harris Administration Driving U.S. Battery Manufacturing and Good-Paying Jobs.
- U.S. Geological Survey. (2023). *Mineral Commodity Summaries* 2023 Data Release.
- U.S. Geological Survey. (2023). Minerals Yearbook 2019, *I*, Metals and Minerals.



How will Piedmont use municipal water at Carolina Lithium?

WATER USE



How will the project impact water *quality* in wells, groundwater, and rivers/streams?

A: We expect that Carolina Lithium will *not* materially change the composition of groundwater... and therefore, *not contaminate* wells or water resources in the area.

A: The U.S. has **strict water regulations**. We will be subject to federal and state oversight by **regulators** and the conditions of our **permits**.

A: **Monitoring** and **testing** will help provide guidance and assurance.

A: As part of our state permitting and project planning process, we have conducted **extensive testing** related to **water quality**.

A: **Groundwater** from our pits will be either *recycled* for use in our mine and concentrator plant OR *settled/tested/treated (if necessary)* before discharge.

A: The **process wastewater** from our operations (manufacturing plants) will **not** be discharged into the rivers or streams.

A: There is **no tailings pond** (no risk of failing).



How will the project impact local wells and water availability for residents and local businesses?

WATER QUANTITY

A: Based on testing and study of the local hydrogeology, we don't expect our operations to create significant issues with water availability to nearby wells – i.e., no "widespread" drying up of wells.

## A: We have conducted a water draw down study, which is being validated with the County's hydrology consultant, Dr. Spruill.

Preliminary results: Estimate 10 parcels impacted by more than 1 foot

A: We expect to bring municipal water and sewer to this region of the County – including residents and businesses (current and future).

A: If our operations impact water availability of particular wells, Piedmont will work with those neighbors to ensure their sustainable access to water.\*

\* Details to be determined by Community Development Agreement





How will Piedmont use freshwater at Carolina Lithium?







How do sedimentation basins and ponds work to help manage freshwater at Carolina Lithium?



Will Carolina Lithium "create" or "release" arsenic into the local groundwater?

A: No, Carolina Lithium will not utilize, create, or release arsenic into the groundwater.

- Arsenic and other heavy metals are naturally occurring in this region in varying concentrations in the rocks, soil, and groundwater because of the underlying volcanic rock.
- When we excavate lithium ore, we will largely be working **below** the water table (see graphic below).
- Water from the pit will not flow back up into the water table it will be pumped out to sedimentation ponds.



Nasdaq : PLL 
ASX : PLL 
PIEDMONT





Will Carolina Lithium "create" or "release" arsenic into the local groundwater?



Nasdaq : PLL MASX : PLL PIEDMONT

How will waste be disposed? Will it be hazardous?



A: Normal plant and business waste (e.g., "dumpster trash") will not be hazardous.

A: Lab waste: as with most manufacturing sites, a nominal amount of hazardous material may be generated from our lab. We plan to dispose of these materials with a permitted company equipped to remediate them.

A: Conversion facility tailings (from lithium salt production): these are nonhazardous materials that are expected to be disposed of at an appropriate offsite location.

A: Waste rock: "leftover" rock that has no lithium or byproducts is going to be used to refill the pits to reclaim them. Some of this rock could potentially be sold as an aggregate for road projects or similar uses.

**A: Concentrator tailings**: sand-like crushed rock is being planned co-mingling with our waste rock.

#### A: There will be no tailings dam or impoundment.

Nasdaq : PLL 
ASX : PLL 
PIED



How will the project impact the air quality in the area?



A: We have conducted stringent air emissions modeling and determined that we will not impact the air quality that currently exists outside of the project property line.

## A: We plan to have robust emission control equipment in place on all equipment where there is potential to emit a contaminant.

 Watering during the mining process will also help lower dust levels and ensure air quality.

#### A: Our air permit application has been submitted to the North Carolina Department of Environmental Quality, Division of Air Quality and was deemed complete in February. It is currently being evaluated by the state.

• We have provided air quality information to DAQ, and they are working through that review process to either grant us the permit or ask us to make modifications.





A: No. Like in other modern mining projects, we will reclaim the pits we dig *during* the active project life. This is called *progressive reclamation* and is considered best practice in the modern mining industry.

#### A: Each pit will be excavated and reclaimed one at a time beginning with the South Resource, then East, West, and lastly, North.

- Excavated rock ("waste rock") will be used to refill the pits, except North Resource, which will fill with water.
- Rock will be covered with soil and native vegetation planted.

## A: We want the Carolina Lithium project site to be put to good use when operations are finished.

• The site could be a place for parks, trails, greenways, industrial uses – or a combination.

#### A: The North Pit is expected to remain empty and fill with water – we plan to own and maintain this property in perpetuity. The reclamation bond will help support its maintenance.

How loud and how long will each blast be?

NOISE & VIBRATIONS

## A: Using modern, sophisticated engineering designs, blasts are typically noticed for only <u>a few seconds</u>.

• Computer and chemical technology allow us to be more precise.

## A: Blasting is being designed for vibration levels within the limits of the "Z-Curve" established by the US Bureau of Mines (USBM), the regulatory standard for NC.

#### A: Blasts within the limits do not cause structural damage.

• More than 40 years of data illustrate that staying within the USBM limits causes no damage to offsite structures.

## A: Blasts planned to be well within these standards – with most expected to be <50% of allowable levels.

- We will collect data from each blast, assess our impact and adjust plans to ensure that vibrations and air blasts are in compliance with minimal disruptions to nearby neighbors.
- Data will be recorded on seismographs and may be audited by the state.

## A: Neighbors within 2,000 ft of the blast may perceive *wind* or *vibrations* from blasting activities.

• Both will **decrease rapidly** with distance from the blast site, and the perception depends on a range of factors: weather, indoors vs. outdoors, orientation from blast, etc.



How often and when will blasting occur?

#### **NOISE &** VIBRATIONS

#### A: Initially, we plan to only blast once per day, likely no more than twice per day, as needed and depending upon scheduling requirements.

 Piedmont will communicate with nearby residents about blasting activities. We plan to share a regular blasting schedule on our website, a recorded message, emails, and signs onsite.

A: In compliance with the Gaston County mining ordinances established in 2021, no blasting will be conducted until one hour after sunrise or within one hour of sunset (no blasting during the night).

#### To mitigate disruption to neighboring homeowners, we also will *not* blast on:

- Sundays
- Christmas Day
- Good Friday
- New Year's Day
- Memorial Day

- Independence Day
- Labor Day
- Veteran's Day
- Thanksgiving Day





Is lithium hydroxide flammable?



EMERGENCY RESPONSE

## A: No. The lithium hydroxide we plan to produce at Carolina Lithium is *not flammable or explosive.*

- **Pure lithium metal** is highly reactive; **lithium hydroxide is a salt** and can be treated just like any other **non-hazardous, non-explosive material**.
- We are **not producing or engaging** with **pure lithium metal**.
- Lithium metal does not occur in nature, it is a refined product.
- The lithium we plan to excavate is mixed with other elements **in rock** creating lithium ore called *spodumene*.
- We are producing **lithium hydroxide**, which is then used in the production of lithium-ion batteries, but **we are not making batteries**.



Lithium Hydroxide (salt) Not Flammable



Lithium Metal Flammable

Nasdaq : PLL BAS



What is Piedmont's emergency response plan?



EMERGENCY RESPONSE A: Lithium hydroxide is not a fire hazard, but it is important that we ensure appropriate emergency response resources are in place to support our operation in the event of an emergency – just like any other manufacturing or industrial operation.

- We plan to work with local first responders to determine the capabilities that may be required to respond to an emergency at our site, just as all manufacturing and industrial operations should do to ensure that proper safety protocols are in place.
- Piedmont will also join the Local Emergency Planning Committee (LEPC).

#### A: The Carolina Lithium project is being designed with on-site fire protection

- Onsite fire water tank
- Fully sprinkled to code and in some cases exceeding code
- Fire hydrants around the property
- Visual and audible notification systems



What is the expected lifespan of the Carolina Lithium project?

How will the facilities be decommissioned at the end of their useful lives?



A: Our lithium hydroxide conversion facility has been designed for a **30-year lifespan**, a typical design life for an industrial plant of this type.

A: Piedmont has technically defined ore reserves\* that support an initial mine life of **11.5 years**. But – as is common in exploration and production activities in mining – it's possible that the life of mine will **extend beyond that timeframe**.

A: If the time comes when the lithium resources are no longer produced, our infrastructure and the skilled workforce can be utilized for other manufacturing purposes or evolve over time as the market evolves.

A: The **concentrator facility** will be removed, and the site reclaimed once mining operations are completed.

A: The **conversion facility**, like other manufacturing facilities, may be **converted** for another use. The building may be entirely repurposed.

A: If the **conversion** building cannot be sold or converted for another use at the end of its lifespan, Piedmont Lithium will remove the building, utilizing funds from a **reclamation surety bond** provided by Piedmont Lithium.

\*Defined as "probable" by criteria that govern the calculation of ore reserves.





What kind of impact does Piedmont expect to have on nearby property values?



#### A: Research shows that properties like those around our proposed Carolina Lithium project will *not decrease* in value but will likely *increase* as a result of our operation.

- Extensive research by the Phoenix Center for Advanced Legal and Economic Public Policy Studies found **no compelling statistical evidence** that either the anticipation or the ongoing operation of rock quarries negatively impact home prices.
- Using multiple simulation methods, the Phoenix Center study finds that if anything **home prices near quarries** *rise*, **not fall.**
- Likely a result of **"higher economic use" of land** and **increased economic prosperity** in the area.

A: We will hire a 3<sup>rd</sup> party real estate consultant to conduct research specifically in this area.

A: Piedmont Lithium plans to establish funding to assist nearby property owners if they are unable to sell their home or property at fair market value within a reasonable time period.





## APPENDIX SLIDES

#### **Appendix A**

What measures is Piedmont taking to reduce traffic and dust from the operation?



A: We plan to invest millions of dollars in enclosed, electric-powered conveyor belts that will help us reduce traffic, dust, noise, and the need for trucks.

A: These large conveyor belts will move material from our mining operation to our spodumene concentrator and lithium hydroxide production facilities.



Using the conveyor system to transport material will require fewer trucks, which should also reduce the noise and dust compared to traditional hard rock operations.

- Additionally, we plan to maximize delivery of materials by rail through our rail spur connection to CSX, further reducing the number trucks in and around our project site.
- Watering during the mining process will also help lower dust levels and ensure air quality.
- DOT has approved our traffic impact assessment plan, which will be provided as part of our rezoning application.



#### **Appendix B**

What is the expected traffic impact related to the project?



A: Plans are underway to conduct a traffic impact assessment, which will be provided as part of our rezoning application.

A: We expect approximately 75 trucks making trips on a daily basis.

## A: Using the conveyor system to transport material will require fewer trucks, compared to traditional hard rock operations.

• Additionally, we plan to maximize delivery of materials by rail, further reducing the number trucks in and around our project site.

#### Appendix C

How will Piedmont control erosion?

A: As part of the mining permit application, we provided Mooresville Regional Office (MRO) with erosion and sediment control plans. They must approve these plans as part of the mining permit process.

- We will prevent run off by using silt fencing systems.
- Skimmer basins and sedimentation ponds will be strategically located to capture any and all rainwater from the site during pre and post construction.
- MRO will conduct periodic inspections during and upon completion of construction.



Nasdaq : PLL BASX : PLL PIEDMONT

#### **Appendix D**

What regulations and permits will govern the project?

REGULATIONS

#### A: Our project will be tightly governed by strict regulations and permits.

• The U.S. is among the world's strictest regulators of quarrying and industrial activity. We plan to work diligently with federal, state, and local regulatory authorities, governing bodies, and community members to ensure compliance in the permits we have and expect to receive:

#### **Permits Received**

- Clean Water Act Section 404 Standard Individual Permit, U.S. Army Corps of Engineers
- Clean Water Act Section 401 Individual Water Quality Certificate, North Carolina Division of Water Resources

#### **Permits Processing**

- Mining permit, North Carolina Department of Energy, Minerals, and Land Resources
- National Pollutant Discharge Elimination System, North Carolina Division of Water Resources
- Title V Prevention of Significant Deterioration Air Permit, North Carolina Division of Air Quality

#### **Permits to Request**

- Rezoning and Conditional Use Permit, Gaston County
- Municipal wastewater permit, City of Gastonia Wastewater Treatment
- Building permits, Gaston County Planning
- Driveway permits, NC DOT
- Encroachment Permit for an at-grade rail crossing, NC DOT
- Explosive permits, U.S. Bureau of Alcohol, Tobacco, and Firearms
- Gaston County Watershed Permit, Gaston County Planning
- Road abandonment, NC DOT and Gaston County



#### Appendix E What is the status of the state mining permit?

#### A: Piedmont Lithium has nearly completed a rigorous process to obtain our state mining permit, which began in August 2021 with the North Carolina Department of Environmental Quality.

5/1/2023



## **CAROLINA LITHIUM: PERMITTING & APPROVALS**

#### Appendix F

#### **STATE MINING PERMIT**

PIEDMONT ACTIVITY	DATE	AGENCY RESPONSE	RESPONSE DATE
Application Submission	August 31, 2021	DEMLR sends Additional Information Request (#1)	October 29, 2021
		Public Hearing	November 15 and 18, 2021
Additional Information Request # 1 Response	December 16, 2021	DEMLR sends Additional Information Request (#2)	January 14, 2022
Additional Information Request # 2 Extension Request	June 30, 2022	DEMLR grants extension until January 8, 2023	July 12, 2022
Additional Information Request # 2 Extension Request	December 28, 2022	DEMLR grants extension until May 1, 2023	January 5, 2023
Additional Information Request # 2 Response	April 27, 2023	DEMLR sends Additional Information Request (#3)	May 30, 2023

#### **PERMITTING & APPROVALS**

PERMIT TYPE	PERMIT SUBMITAL	CURRENT STATUS	EXPECTED PERMIT RECEIPT
State Mining Permit	August 31, 2021	Piedmont preparing response to ADI # 3	Q4
CD Zoning	TBD	Awaiting Mine Permit receipt	TBD
Air Permit – PSD Title V	August 31, 2022 January 4, 2023	Working with Agency – Division of Air Quality	May 2024
NPDES Wastewater	Dec 23, 2022	Piedmont preparing response to ADI	May 2024
Municipal Wastewater	TBD	Preparing Application	TBD

Nasdaq : PLL BASX : PLL PIEDMONT



F



 $\mathbb{R}$ 

#### Appendix H

Is it possible that Piedmont will process non-local material at Carolina Lithium?



A: We intend to process local spodumene for as long as local resources support our conversion operation. We believe there are extensive resources in the Carolina Tin Spodumene Belt – 80% of which have not yet been commercially explored.

A: However, like the two other lithium companies in the area, there may be a business need for processing non-local material:

- Livent brings their lithium feedstock (lithium carbonate) from Argentina to Bessemer City.
- Albemarle brings lithium carbonate to their production facilities in Kings Mountain from **Chile and Nevada** and plans to restart local mining.

#### A: Hypothetically, it is possible that a car manufacturer, for example, could ask us to process spodumene concentrate that they procure from another source.

 The Carolina Lithium conversion facility is one of the few U.S. lithium hydroxide plants proposed for development in this decade.



#### Appendix I

What kind of tax (fiscal) impact does Piedmont expect to generate for Gaston County?



#### A: A report produced by Sanford Holshouser Economic Development Consulting demonstrates the potential fiscal impact of Carolina Lithium.

#### TOTAL ESTIMATED FISCAL IMPACT TAXES: STATE AND LOCAL (Per Capita-Static Model + Ad Valorem Estimate)

TAX	DIRECT	INDIRECT & INDUCED	TOTAL	Total 5-Year Projection
PROPERTY (Local)	\$510,402	\$857,475	\$1,367,877	\$6,839,385
SALES (State & Local)	\$548,952	\$3,922,239	\$1,471,191	\$7,355,955
INCOME (State)	\$624,510	\$1,049,177	\$1,673,687	\$8,368,435
EXCISE (State & Local)	\$231,300	\$388,584	\$619,884	\$3,099,420
OTHER (State & Local)	\$177,330	\$297,914	\$475,244	\$2,376,220
TOTALS	\$2,092,494	\$3,515,390	\$5,607,884	\$28,039,420
Ad Valorem Property Tax			\$3,390,492	\$16,952,460
		TOTALS	\$8,998,376	\$44,991,880
			Nasdag : PL	

#### **Appendix J**

What kind of tax (fiscal) impact does Piedmont expect to generate for Gaston County?

ECONOMIC IMPACT

## A: A report produced by Sanford Holshouser Economic Development Consulting demonstrated the potential fiscal impact of Carolina Lithium.

- Our expected job creation combined with the direct taxes paid by Piedmont is projected to produce more than **\$10 million in fiscal impact per year.**
- This figure is derived from an industry accepted fiscal impact model the RCS Model<sup>©</sup> is based upon per capita tax data as reported for each state by respected research from the Tax Foundation, Washington, DC, 2021 Report (the most current version) that considers both:
  - 1) Direct taxes expected to be paid by Piedmont (property & operational taxes, etc.)
  - 2) Employee taxes (direct and indirect via expected spending within the community)
- Ad valorem taxes are based on the estimated capital investment for the proposed:
  - 1) Concentrator Operations facility of \$287,027,441
  - 2) Lithium Hydroxide Operations facility of \$407,745,480 (total \$694,772,921)
- The current Gaston County tax rate is \$0.61 per \$100 valuation. However, the **\$10 million figure is based upon a more conservative approach based on 80% of the total capital investment**.
- The RCS model figure **does not include Social Security or other federal tax revenues** as those are "leakages" from the region and state. It also accounts for the likelihood that employee expenditures would understandably be outside of the county or state.
- This tax revenue could support the county in meeting its priorities for schools, public safety, libraries, senior citizen programs, parks and recreation, emergency services, and more.
- We believe Gaston County is positioned to benefit from the well-paying, local jobs, tax revenues, and economic opportunity our proposed operation is likely to bring.



#### Appendix K

How are live burn trainings conducted?

# A: Firefighters begin the safety and approval process by thoroughly performing testing with the state, sending multiple samples to ensure homes are free of asbestos.

- From there, samples are sent to the North Carolina Department of Air Quality for further review and approval.
- Afterwards, all furniture is removed from homes, and sites are prepped with wood pallets and straw to ensure that only structures are burned.
- Neighbors are notified prior to training sessions to ensure that those who live nearby are aware when exercises occur.
- After training sessions are complete, firefighters monitor the sites to make sure fires are completely out.
- Piedmont then reclaims the area, cleaning the site, removing debris, and planting native grass.





#### Appendix L

Why are firefighters burning homes on the proposed Carolina Lithium project site?



## 

A: Piedmont Lithium partners with local first responders and nearby schools to facilitate vital, lifesaving training sessions for firefighters, SWAT team members, and other emergency services personnel in our community.

# A: These exercises allow firefighters to experience heat, smoke, and flames in real-world simulations, providing critical, life-saving learning opportunities in a safe, highly controlled environment.

- When Piedmont purchases land for the project, we offer homeowners the opportunity to move homes to their new locations.
- If they choose not to and the homes are no longer needed, the homes provide a unique opportunity for firefighters.
- Every home is different, providing a variety of structures and layouts to conduct training.

# "This program is saving lives in our community. It's helping us better prepare our firefighters by putting them in real-life scenarios that teach them how to safely and effectively fight fires. The controlled, supervised experience is a critical part of instruction, and we are incredibly thankful for the partnership with Piedmont."

- Earl Withers, Live Burn Trainer for Gaston College and the Gastonia and Dallas Fire Departments.



#### **Appendix M**

Why are firefighters burning homes near the Carolina Lithium project site?

## 

#### To date, more than 20 police departments, fire departments, and schools as well as hundreds – if not thousands – of first responders have benefited from lifesaving trainings.

- Ag Center Fire Department
- Bessemer City Fire Department
- Boiling Springs
   Fire Department
- Cherryville Fire Department
- City of Gastonia Fire Department
- Crouse Fire Department
- Crowder's Mountain Fire & Rescue
- Cleveland Community College Firefighter Academy
- Dallas Fire Department
- Denver Fire Department
- East Gaston Fire Department

- Gaston College
   Regional Emergency
   Services Training Center
- Gaston County Regional SWAT
- Gastonia Police Department SWAT
- Hugh's Pond Fire Department
- Lincolnton Fire Department
- Mount Holly Fire Department
- New Hope Fire Department
- Ranlo Fire Department
- South Fork Fire Department
- Tryonota Fire Department
- Union Road Fire Department
- Waco Fire Department

What is Piedmont willing to do to support the community near our project?



A: The success of our communities is vitally important to our proposed operations, and our engagement with residents is a key component in our plans to ensure long-term socio-economic development through Carolina Lithium.

## A: We have devoted tremendous time and effort to engaging community stakeholders regarding our proposed project plans.

- We send community mailers, visit with residents and businesses via in-person meetings and phone calls, and share information via social media, press releases, and media interviews.
- As we communicate and collaborate with the community through our activities, our goal is to develop and maintain long-standing relationships with residents near our Carolina Lithium. We want to gain critical feedback from our neighbors so we can better develop and operate our projects.

#### A: Several modifications have been made to our proposed operation based on direct feedback from community members. These modifications include:

- Creating a fully integrated lithium chemical manufacturing business on a single campus to minimize land impacts and consolidate transportation networks
- Moving away from lithium hydroxide manufacturing by acid leaching to more advanced, sustainable technologies
- Performing additional testing on our potential impacts to water resources in the area of our proposed operations
- Changing our quarrying plan to reduce reliance on diesel-operated trucks by utilizing enclosed, electric-powered conveyor belt systems to reduce emissions, noise, and dust
   Modifying our proposed operations to reduce the number of road closures required for our project



Geologists Zach Grimac and Mike Mason helped residents and business leaders understand the unique geology of the Carolina Tin-Spodumene Belt at the open house of our corporate headquarters.

#### **Appendix N**

What is Piedmont willing to do to support the community near our project?



In 2022, Piedmont donated \$150,000 to Gaston County Habitat for Humanity to build an affordable new home in the community



## A: Since 2020, we have proudly contributed over \$300,000 and countless volunteer hours to key organizations upon which the community relies.

• Habitat for Humanity, the Schiele Museum, Meals on Wheels, Toys for Tots, the Cherryville Chamber of Commerce, Cancer Services of Gaston County, Holy Angels, and Gaston College, among many others.

#### A: Our Piedmont Power for Life Foundation was launched in December 2022 to support important charitable and educational initiatives in the community, including scholarships for students pursuing studies in science, technology, engineering, and mathematics (STEM).

- The foundation has already awarded scholarships to three well-deserving students in North Carolina. A high school senior from Highland School of Technology, Cherryville High School, and South Point High School will receive up to \$20,000 over the next four years to support their pursuit of STEM programs at accredited, post-secondary institutions.
- Multiple grants have been awarded for local education programs and community organizations.

## A: Our Development Agreement with Gaston County is expected to help define further benefits to the community from the project.

A: We signed a Community Development Agreement with the City of Cherryville on May 31, 2023, to provide funding for recreation and the general health and well-being of the community for many years to come.



Riley Kiser is a Cherryville High School student and one of three inaugural North Carolina scholars of Power for Life. PHILANTHROPY

#### **APPENDIX O**



Map of property owned/leased/contracted by Piedmont Lithium as of July 2023.



**Appendix P** 



#### **LEADERSHIP TEAM**

195+	years in mineral exploration, mining, and mining construction
65+	years in the lithium industry
120+	years in safety leadership
160+	years in financing
205+	years in chemical and manufacturin operations



#### Appendix Q

## **EXISTING GASTON COUNTY ARSENIC CONCENTRATIONS**

Existing arsenic "hot spots" and the corresponding locations of registered wells are noted on these maps. A municipal water ine to the Carolina Lithium project would allow residents in these areas the opportunity to connect to the proposed municipal water extension and reduce their current health risks.



Concentrations of arsenic relative to EPA guidelines.<sup>1</sup>



Concentration of arsenic relative to EPA guidelines and overlaid against registered wells.<sup>1</sup>



<sup>1</sup> Gaston Water Map, Gaston County DHHS & UNC Charlotte

#### Appendix R

#### **PRIMARY SOURCES OF LITHIUM**

	Proven Te	chnology	Potential Future Technology		Demand Gap ~715 000/tov	
Ha • Ide ba	eal for EV tteries ss land than ine	Brine • Large water usage • Large land footprint	Clay • Acid Use	Direct Lithium Extraction		/15,000/tpy
• Le th	ess water an brine			• Costly	~17,000/tpy <sup>1</sup>	
Currently used in Decade away from commercial production		Current Capacity	2030 Demand			

LiOH Supply vs.

## Appendix S POTENTIAL WATERLINE EXTENSION\*



\*Subject to completion of waterline extension engineering process and approvals.



44