

Testimony of Scott Thibodeaux

Operations Director for Albemarle Corporation's Silver Peak, Nevada Site

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I am Scott Thibodeaux, the Operations Manager of Albemarle Corporation's lithium mine in Silver Peak. With me is Leo Drozdoff, our legislative consultant. I am proud to say that I am a native Nevadan having grown up in Tonopah. Testifying here today in front of my state legislators is a real thrill not only for me, but also for my family.

On behalf of Albemarle, thank you for inviting me here today to speak about the importance of SCR-1.

Albemarle is a global specialty chemicals company with leading positions in lithium, bromine and refining catalysts. We power the potential of companies in many of the world's largest and most critical industries, from energy and communications to transportation and electronics.

Primarily of interest today is the fact that Albemarle is the world's largest lithium mining and processing company for the global battery market. Our lithium ends up in batteries that run electric vehicles as well as grid storage for the utility industry.

While our headquarters is in Charlotte, NC, we are proud to tell you we own the only operating, lithium mine in the United States located in Silver Peak; our operations began in the 1960s. We have 65 employees and 10 contractors at the Silver Peak site. The average fully loaded compensation package is about \$94,000 a year.

I should also add that we have additional lithium operations in Kings Mountain, North Carolina, in Chile, Western Australia and China. Our Silver Peak and Chile sites extract lithium from brines, found in underground aquifers, and process it by crystalizing and filtering the brine until we have a highly concentrated lithium solution. Our sites in Australia have lithium deposits in an ore called spodumene. That mining process involves standard drilling and blasting followed by crushing and floatation circuits.

The process at our Silver Peak location is very natural. The lithium is extracted from the underground brine resource through a series of wells. The wells discharge into a series of large evaporation ponds, allowing solar evaporation to concentrate the lithium. Throughout the process, other minerals, such as potassium and sodium, precipitate out of the brine.

The evaporation system is segmented into a number of ponds allowing for continuous extraction and concentration. The first pond would have the lowest concentration brine while the last pond in the system would have the highest lithium concentrations, sufficient for processing. From start to finish, the process takes approximately 18 months.

After about 18 months, we crystalize and separate the lithium in our processing plant. Once processed into lithium carbonate, it is transported to several customers throughout North America and Europe, some being battery manufacturers. Eventually, those batteries end up in electric vehicles, consumer products and defense materials.

In the last legislative session, we were pleased to see SCR-1 introduced and would like to take this opportunity to thank Senator Pat Spearman for its introduction and passage. We believe the goals of the legislation are important to the management of Nevada resources as well as providing tremendous opportunities to the University students of Nevada to become more aware and involved in the state's mining industry.

As with all companies, having a well-trained and educated employee base at Albemarle is critical to our success. It is also important to provide young Nevadans with job opportunities within their own state.

Finding people to fill these jobs can at times be challenging given the location of the mine and competition with other industries. Part of our corporate culture at Albemarle is to power the potential of the people in our communities, especially young adults.

Silver Peak is a great place to live, with around 100 residents. Nevertheless, for people unfamiliar with life in rural Nevada, it is a difficult place to attract employees. Silver Peak does not have the amenities most people are accustomed to having where they live - such as grocery stores, restaurants or gas stations. The residents of Silver Peak travel nearly an hour to Tonopah for these amenities.

Our employees at Silver Peak generally stay in Silver Peak for their workweek, in most cases away from their families, and then travel home for their days off. Even with all these complications, our employee base is very supportive of what Albemarle is doing at the location and knows how important the work we do there is to providing a sustainable future.

In conjunction with our priority to provide jobs in Silver Peak, we also are committed to helping the communities in which our employees live. This effort not only is aimed at supporting our employees but at enticing future employees to work for Albemarle.

We believe that nurturing our communities and promoting our employees' philanthropic efforts are among our most important responsibilities. Over the years, Albemarle, our employees and retirees have invested millions of dollars and countless volunteer hours in support of our communities. In 2007, Albemarle created the Albemarle Foundation - a private endowed 501c3 entity who set out with a mission to make a positive, sustainable difference in the communities where we live and operate.

The Albemarle Foundation recognizes the important skills that can be obtained from a solid educational foundation, including critical thinking and data analysis. We also recognize the assistance needed in the classroom and beyond to move the needle, be a change agent and make a true positive difference in our communities. Our company purpose statement - making the world safe and sustainable by powering the potential of people - inspires and motivates us to direct funds and support organizations that are focused on providing positive educational outcomes, because we believe nothing powers potential like education and knowledge.

The first thing we found lacking when we acquired the Silver Peak site in early 2015 was adequate medical care. In order to enable not only our employees but also the community of Tonopah to have real time medical care without having to drive to Reno or Las Vegas, the Foundation, in 2016, made a \$100,000 contribution to the Renown clinic (now the Central Nevada Regional Care clinic) in Tonopah. The money went toward the purchase of equipment that helps the clinic diagnose patients and relay that information to hospitals in the state. This dramatically speeds up treatment for patients.

To support our goal of improving education in the communities in which we live, in 2017, the Foundation contributed \$22,000 divided between the Silver Peak elementary school and the fire department. In 2018, we contributed \$25,000 divided between Bishop Elementary Schools Together Foundation, the Esmeralda County School District, Little League Baseball and the Silver Peak Fire Department.

In 2019, the Foundation contributed \$52,500 split between the Silver Peak Fire Department, Bishop Elementary Schools Together Foundation, Little League Baseball, Radio Goldfield Broadcasting, Silver Stage Elementary, Tonopah Historic Mining Park Foundation, Tonopah High School, Beta Sigma Phi Charitable Foundation, Esmeralda County School District, Hughson Christian School, Minden Elementary School, Tonopah High school and the Tonopah Volunteer Fire Department.

For this year, final decisions have not been made, but the Foundation will again provide valuable funding for the communities of Silver Peak and Tonopah.

In addition to the Foundation activity, over the past three years, we have welcomed at the Silver Peak site educators, students and entire classes of students from all over the world. Often times these universities visit on an annual basis.

Specific to Silver Peak, we have a variety of skill sets required for the safe and efficient operation of the wells and the processing plant. These include electrical engineers, chemical process engineers and journeyman electricians. Another critical skill set particularly needed for Silver Peak, is qualified geologists and hydro geologists. To fill that latter role, we have had to rely on consultants and employees from third parties or our Chilean site, which is not the same as having a dedicated person at Silver Peak. In addition to finding qualified workers, Albemarle provides all the safety training and other training to supplement what they learn in school.

In closing, we would like to work with the state and the universities to find ways to encourage young adults to go into these critical fields in the mining industry. Nevada has a lot to offer the next generation and rich mineral resources to keep cell phones, laptops and electric vehicles going long into their lifetime. SCR-1 is our way of starting down that path.

Thank you again for this opportunity to speak with you on this important topic.