genesisalkali

July 25, 2024

DOI BLM RSFO
Attention: Maura Bradshaw
280 US Highway 191
Rock Springs, WY 82901

Re: Moxa Carbon's Southwest Wyoming CO2 Sequestration Project
DOI-BLM-WY-D090-2023-0010-EA

Dear Maura:

Genesis Alkali operates a multi-faceted trona mining and natural sodium products production facility in Green River, Wyoming, supplying essential mineral products used around the globe. We operate the Western Hemisphere's largest natural soda ash mine and production site, using the latest technological innovations to better serve our customers.

We recognize the critical importance of acting sustainably for the benefit of our people, our communities, and our state. Our strategy includes developing innovative production processes that create a sustainable advantage while minimizing the overall impact of our operations and supply chain. We do this by using resources effectively and responsibly.

Genesis has thousands of acres of sodium mineral leases in Sweetwater County, Wyoming, including a significant holding of Wyoming Trona and Associated Minerals Mining Leases. With Moxa Carbon's Southwest Wyoming CO2 Sequestration Project ("Project") seemingly encroaching on Genesis Alkali's existing sodium leasing area and active mining operations, we would like to provide commentary and feedback based on the limited information we have to raise concerns and potential issues/conflicts that may arise based on the proposed Project and location.

The BLM is well aware that the Known Sodium Leasing Area (KSLA) is truly a unique resource of national and international importance due to no other deposit of trona of this magnitude or purity being found anywhere else on earth. As stated by the BLM's District Manager in the cover letter to the BLM Draft Environmental Assessment of Sodium Mineral Development in the Rocks Springs District (BLM Document WY-049-EA81-8, dated August 7, 1981): *"The regional Sodium Mineral Development Draft Environmental Assessment that follows, analyzes the use of a resource that is of international as well of national importance. The trona deposition area within three resource areas of the Bureau's Rock Springs District is presently recognized as the world's largest commercial source of natural soda ash which is used in the production of a wide range of goods –from the glass in your car's windshield to the soap used to clean your clothes. The Bureau of Land Management is obligated to the nation to assure that this unique resource is developed in the best interest of the public…".*

In addition to the economic benefits obtained from the 12 million tons of natural soda ash produced from the KSLA, Soda ash is a critical input for the manufacture of many essential products used every day, including glass, lithium carbonate used for batteries, and baking soda. Outside of the KSLA, Trona resources of a substantial quantity and purity to support commercial natural soda ash production are rare worldwide, including the rest of the United States. ***There is no other location that contains trona resources in the quantity and purity necessary for the development of new substantial production of natural soda ash.*** As a result, any BLM management actions that limit the development of new production or cause the decline of existing natural soda ash production in the Green River basin would, in effect, prevent that soda ash production from happening anywhere in the United States. Because soda ash is critical for the production of many essential products, production that cannot occur in the US will almost certainly move to foreign nations, like China, and will likely be produced using synthetic soda ash production technology, which has negative consequences for the consumers and the environment due to its process' higher energy consumption and greenhouse gas emissions. As such, the BLM must protect the trona mineral resource immediately adjacent to the Project location.

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The concerns arise from the maps published by the BLM on July 1, 2024, suggesting that this Project is using the KSLA boundary as the eastern boundary for the area. This eastern boundary of the Project is near and/or directly adjacent to Genesis Alkali's existing trona leases, inclusive of our active Granger trona mine and future planned areas for our Westvaco mining operations.

With a limited understanding of carbon sequestration, we have safety concerns and insist on a minimum 2-mile buffer between the expected CO2 storage plume and the Genesis Alkali mineral leases and/or KSLA boundary to avoid any potential migration of gas into existing mining operations and future planned mining areas. We realize the BLM does not analyze potential impacts on groundwater because this is delegated to the State of Wyoming via the UIC Class VI program. However, the BLM must evaluate potential impacts to the subsurface estate. It appears the BLM has not considered the potential hazard of seismic activity or other mechanisms that could result in the fracturing or migration of gas to faults. Because the eastern boundary of the Moxa Carbon project abuts the KSLA, any fracturing could result in migration to the KSLA. For this reason, BLM must designate a minimum 2-mile buffer. In addition, if future information, especially that from CO2 plume modeling and/or seismic studies, indicates that 2 miles is not sufficient to mitigate the potential migration of CO2 into active and/or potential trona mining areas, that buffer should be increased.

Miners' safety and safe mining operations are our top priority. Unlike the Frontier Carbon Solutions' Sweetwater Carbon Storage Hub project, this Project has not yet received its UIC Class VI permit nor has their permit application been published making it impossible for Genesis Alkali to provide full commentary on the potential impacts of the Project to the KSLA or to our assets. In contrast, the Frontier Carbon Solutions project permit application (see WY UIC program permit WYS-023-00205) included significant information regarding the potential CO2 plume migration, which demonstrates that their project should not have an impact on the KSLA, thus lessening our concern regarding the safety of our miners, operations, and assets.

We encourage the BLM to postpone issuing a pore space right of way for the Moxa Project until after the potential impacts are demonstrated via their UIC permit application, mitigated for the concerns raised by us in this letter and any future concerns that arise following the publication of the permit application, and more importantly after the State of Wyoming issues the UIC permit.

We appreciate the opportunity to comment and look forward to continuing to work with the BLM of Wyoming!

Sincerely,

Aaron Reichl
Vice President Technology & Business Development
Genesis Alkali