

[6450-10-P]

DEPARTMENT OF ENERGY

Record of Decision: Issuance of a Loan to Rhyolite Ridge, LLC for the Construction and Startup of the Lithium Carbonate On-Site Processing at the Rhyolite Ridge Lithium-Boron Project.

AGENCY: Loan Programs Office (LPO), U.S. Department of Energy.

ACTION: Record of decision (ROD).

SUMMARY: The U.S. Department of Energy (DOE) announces its decision to issue a loan under the Energy Independence and Security Act of 2007, which established the Advanced Technology Vehicles Manufacturing (ATVM) Program, to Rhyolite Ridge Holdings, LLC (the “Applicant”, or the “Owner”) a wholly owned subsidiary of Ioneer Ltd. (the “Company”, the “Sponsor”, or “Ioneer”), for the on-site processing of lithium carbonate and associated infrastructure (onsite power generation and spent ore storage facility), at the Rhyolite Ridge Lithium Boron Project in Esmeralda County, Nevada. The loan would not finance the development and operation of the mine. The Project would produce lithium carbonate that is expected to be sold into the electric vehicle battery market.

ADDRESSES: Copies of this ROD and the Final EIS may be obtained by accessing these documents and additional information about DOE’s Loan Programs website at <https://www.energy.gov/lpo/environmental-impact-statements>, or LPO’s NEPA Program website at <https://www.energy.gov/lpo/environmental-compliance-1>.

FOR FURTHER INFORMATION CONTACT: David A. Oster, NEPA Document Manager, Technical and Environmental Division, Loan Programs Office (LP-30), U.S. Department of

Energy, 1000 Independence Ave SW., Washington, DC 20585, telephone (240) 457-7973; e-mail *LPO_Environmental@hq.doe.gov*.

SUPPLEMENTARY INFORMATION:

The environmental impacts of the construction, operation, and reclamation of the Rhyolite Ridge Lithium Boron Project were analyzed in EIS No. DOI-BLM-NV-B020-2021-0020-EIS: Final Environmental Impact Statement, Rhyolite Ridge Lithium-Boron Mine Project, Esmeralda County, Nevada (89 FR 77174, September 20, 2024). The Proposed Action facilities include: quarry; processing facility; overburden storage facilities (OSFs); spent ore storage facility (SOSF); contact water ponds; batch plant, haul road, service roads; dewatering pipeline; stockpiles; explosives storage area; sewage system; public road realignment; communication towers and all-terrain vehicle trails; proposed monitoring locations and access; proposed water supply testing and facilities including pipelines; and resource exploration drilling and dewatering wells. DOE's proposed action of providing a loan to Ioneer for the lithium carbonate processing and associated facilities is completely considered in the BLM's EIS, in which DOE is a cooperating agency.

NEPA Review: In order to propose the project, Ioneer submitted the Plan of Operations (Plan) (NVN 098058) and Nevada Reclamation Permit Application for the Rhyolite Ridge Lithium-Boron Project (Project) to the Tonopah Field Office (TFO) of the Battle Mountain District BLM in May 2020. The Plan included the construction, operation, reclamation, and closure of a surface quarry from which lithium and boron ore would be extracted using conventional quarrying techniques and associated facilities. Following review by the BLM, revised Plans were submitted in July 2020, August 2020, November 2021, January 2022, July 2022, and September 2024. The Plan was accepted by the BLM in August 2020, August 2022, and September 2024.

The Plan was submitted to comply with Title 43 Code of Federal Regulations (CFR), subpart 3809 (43 CFR 3809.401 *et seq.*, as amended), State of Nevada regulations governing the reclamation of mined lands (Nevada Administrative Code [NAC] 519A.010-635). The 43 CFR 3809 regulations require that the BLM fulfill its obligation under the National Environmental Policy Act of 1969 (NEPA) by analyzing and disclosing the potential environmental impacts of the Project. In compliance with the NEPA, the BLM prepared an Environmental Impact Statement (EIS) to address potential effects from the development of the Project. The BLM TFO is serving as the lead federal agency for preparing this EIS, and DOE is a cooperating agency. The Draft EIS was issued on April 15, 2024, and the Final EIS was issued on September 20, 2024. On October 21, 2024, BLM signed a Record of Decision (ROD) for the Project that approved the Plan. The ROD identified North and South Overburden Storage Facility Alternative as the preferred alternative.

DOE has determined that the documentation satisfies DOE's NEPA obligations. DOE's proposed action is to provide funding to be used to support the construction and start-up of the mineral processing facilities and associated infrastructure, which are the same proposed project facilities analyzed in the BLM Final EIS. Accordingly, DOE adopted the 2024 BLM Final EIS as a DOE Final EIS (DOE/EIS-0565) on December 13, 2024.

Alternatives Considered: DOE's decision in this ROD is whether or not to issue a loan to Ioneer to support the construction and start-up of the lithium carbonate processing and associated facilities at the Rhyolite Ridge Lithium-Boron Project Site in Esmeralda County, Nevada. Accordingly, DOE's alternatives are: (1) to issue a loan to Ioneer for the Proposed Action, or (2) not issue a loan to Ioneer (No-Action Alternative).

Environmentally Preferable Alternative: DOE reviewed both alternatives to identify the environmentally preferable alternative and considers the issuance of a loan to pioneer for the Proposed Action as the environmentally preferable alternative. This alternative offers environmental benefits consistent with the statutory objectives of the Energy Independence and Security Act of 2007, as amended, specifically the ATVM Program, which provides loans to support the manufacture of eligible advanced technology vehicles and qualifying components. Lithium is an essential component of electric vehicle (EV) batteries. DOE expects the project to further develop a socially and environmentally responsible U.S. supply chain for lithium that could potentially be used for EV batteries, supporting up to 444,203 EVs per year. This chosen alternative does not limit consideration of alternatives for future NEPA reviews related to the Proposed Action.

Greenhouse Gas (GHG) Emissions and Climate Change: Section 4.1 (Air Quality and Climate Change) and 4.20.1 (Air Quality Cumulative Impacts) of DOE/EIS-0565 discuss the Project's GHG emissions to include process sources and mobile mining equipment. However, the Project will also contribute to reductions in GHG emissions through annual fuel consumption savings. The magnitude of potential annual reductions in gallons of petroleum will depend on the number of EVs that can utilize the lithium carbonate produced by the Project. Lithium carbonate from Rhyolite Ridge could support the production of batteries for up to 444,203 electric vehicles (EVs) annually. The annual avoided CO₂ is calculated from the Project's annual fuel consumption savings (175.6 million gallons of gasoline) multiplied by the U.S. Energy Information Administration CO₂ emission coefficient of 18.73 pounds of CO₂/gallon for gasoline (www.eia.gov/environment/emissions/co2_vol_mass.php). Therefore, the Lithium carbonate

produced by the Project and used in EVs would support a reduction of approximately 1.492 million metric tons of CO₂ per year.

Floodplain and Wetlands Statement of Findings: The EIS (DOE/EIS-0565) considered the relevant information for a floodplains and wetlands assessment pursuant to 10 CFR part 1022. There are no Federal Emergency Management Agency Flood Insurance Rate Maps available for the project area. EIS sections 3.16, 4.16, and 4.20.16 analyze floodplains. Floodplains are also addressed in the Water Resources and Geochemistry Supplemental Environmental Report (SER) to the EIS. Wetlands are analyzed in section 3.17 and 4.17 of the EIS, as well as in the Wetland and Riparian Resources (SER). This process concluded that areas prone to wash-outs may occur in the vicinity of the access road, and Ioneer would implement an Access Road Improvement and Maintenance Plan which includes strategies for managing potential wash out areas.

Approximately 54.46 acres of National Wetland Inventory- mapped wetlands would be disturbed by the project. The EIS concluded that there may be negligible, long term, localized effects on the wetlands delineated in project baseline surveys, because they are outside of the one-mile buffer of the projected 10-foot groundwater drawdown contour caused by the project.

Consultation Requirements: DOE was a cooperating agency with BLM throughout its development of the EIS. To meet its obligations under Section 106 of the National Historic Preservation Act, DOE is an invited signatory to the Memorandum of Agreement (MOA) with the Nevada State Historical Preservation Office (SHPO) and Native American Tribes. DOE signed the executed MOA on October 31, 2024, which outlines the steps BLM and Ioneer would take to resolve any adverse effects that the project would have on historic properties. The BLM and Ioneer have prepared a Historic Properties Treatment Plan, which details how to minimize and mitigate unavoidable adverse effects on potential historic properties. Government to

government consultation with Native American Tribal Nations is described in section 5.2 of the EIS.

DOE's proposed action is included in BLM's biological assessment, submitted to U.S. Fish and Wildlife Service (USFWS) on April 1, 2024, to assess the project's impacts on federally threatened or endangered species and designated critical habitat. DOE submitted its own Section 7 consultation letter to USFWS to meet its obligations under section 7 of the Endangered Species Act on October 8, 2024, requesting coverage under the Biological Opinion for Tiehm's Buckwheat, which USFWS concurred with on December 20, 2024. Additionally, the DOE reviewed the BLM's FEIS and supporting documentation and related surveys, studies, and consultations.

Final DOE/EIS-0565 Review Period: The Notice of Availability of the Final DOI-BLM-NV-B020-2021-0020-EIS was published in the *Federal Register* on September 20, 2024 (89 FR 77174); as previously stated, DOE was a cooperating agency on the BLM EIS. The review period of the BLM EIS was from September 20 - October 21, 2024. In addition, DOE adopted the BLM EIS as DOE/EIS-0565 and the Notice of Availability for the adoption of the BLM EIS was published in the Federal Register on December 13, 2024 (89 FR 100999). DOE has concluded that no new information or circumstances has been submitted that would warrant preparation of a supplemental EIS, or show that the Project would affect the quality of the human environment not already encompassed by the analysis considered in the Final BLM EIS, or considered in the preparation of this ROD.

Decision: DOE has decided to issue a loan to iioneer for the on-site processing of lithium carbonate and associated infrastructure (onsite power generation and spent ore storage facility), at the Rhyolite Ridge Lithium Boron Project in Esmeralda County, Nevada. Approval of the loan responds to the DOE purpose and need pursuant to Section 136 of the Energy Independence and Security Act of 2007, which is to finance projects that reequip, expand, or establish manufacturing facilities in the United States to produce qualified advanced technology vehicles or qualifying components, and also for engineering integration costs associated with such projects. (42 U.S.C. 17013, as amended).

Mitigation: All DOE loan agreements require that the borrower comply with all applicable environmental laws and related requirements. For the Project, this would include conditions and requirements related to authorizations and approvals within the BLM's ROD, all permits and consultations identified in Appendix C of the Final BLM EIS. A borrower's failure to comply with applicable laws, authorizations, and approvals may constitute a default, upon which DOE would have the right under the loan agreement to exercise usual and customary remedies. To ensure that the borrower complies with the requirements of the loan agreement, the Loan Programs Office proactively monitors and administers all operative loan guarantee transactions for the lifetime of the loan.

Signing Authority

This document of the Department of Energy was signed on [_____], by Jigar Shah, Director, Loan Programs Office, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, D.C., on January 17, 2025.

Jigar Shah
Director, Loan Programs Office