

**U.S. Department of the Interior
Bureau of Land Management**

Environmental Assessment

***Finding of No Significant Impact
Competitive Sodium Lease Section 12
(DOI-BLM-WY-D090-2015-0094-EA)***

PREPARING OFFICE

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It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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Competitive Sodium Lease Section 12

Lease/Serial/Case File No: WYW183702 (Sodium Lease)

EA Number: DOI-BLM-WY-D090-2015-0094-EA

Project Location: Tracts of unleased public minerals situated within Section 12, Township 17 North, Range 109 West, of the 6th principal meridian in Sweetwater County, Wyoming.

Applicant: Tata Chemicals (Soda Ash) Partners
P.O. Box 551
Green River, WY 82935

Background

Tata Chemicals (Soda Ash) Partners (Tata) owns and operates the Alchem Mine in Sweetwater County, Wyoming, located approximately 10 miles west of Green River, Wyoming (Project Area). The mine, which is an underground room and pillar mine, and associated soda ash refinery have been in continuous operation since 1968. Allied Chemical Corporation opened the Alchem Mine and plant in 1968. In 1985, the operation was purchased and operated by General Chemical (Soda Ash) Partners and then sold to Tata in 2008. The Alchem Mine has a processing plant at the surface which converts trona ore to soda ash in a multi-step purification process. Soda ash is a raw material used by several industries to make a range of essential products, such as glass, soap and detergents, baking soda, paper, and potable water. Between 2010 and 2013, approximately 4.7 million tons of trona was mined per year by Tata. Tata uses the room and pillar mining method with bore miners and continuous miners and shuttle cars, or continuous haulage systems. The room and pillar method recovers approximately 30 to 35 percent of the trona leaving 65 to 70 percent to remain and support the overlying bedrock layers, which minimizes subsidence. To date, these mining practices have minimized surface subsidence in their operations. Measured subsidence over the areas mined to date generally range between 3 and 6 inches.

Tata submitted an application for a competitive sodium lease sale on October 7, 2014, to support the expansion of their mining operations. The application for the competitive sodium lease sale included the federal portion of Section 12, Township 17 North (T17N), Range 109 West (R109W) (hereon, Section 12). The portion of Section 12 that is available for a federal sodium lease includes approximately 402 acres; the remaining approximately 161 acres in Section 12 are privately held surface and minerals. The BLM processed and evaluated the application under the following authorities: Mineral Leasing Act of 1920, as amended; Federal Land Policy and Management Act of 1976; National Environmental Policy Act of 1969 (NEPA) as amended (42 U.S.C. 4321 et seq.), its implementing regulations found in Title 40 Code of Federal Regulations (CFR) Part 1500–1508; BLM's National Environmental Policy Act Handbook

(H-1790-1) (BLM 2008); Overview of BLM's NEPA Process (BLM 1999); and Considering Cumulative Impacts under the National Environmental Policy Act (Council on Environmental Quality [CEQ] 1997).

Finding of No Significant Impact

Based upon a review of the *Competitive Sodium Lease Section 12 EA* and all other information available to me, I have determined that the project is not a major federal action and will not significantly affect the quality of human environment, individually or cumulatively, with other actions in the general area. No environmental effects meet the definition of significance in context of intensity as defined in the CEQ's criteria for significance (40 CFR 1508.27) and do not exceed those effects described in the Kemmerer Resource Management Plan/Final Environmental Impact Statement (EIS). Therefore, an EIS is not required. In addition, no mitigation measures were found to be necessary.

The Project Area is located within a Greater Sage-grouse Priority Habitat Management Area (PHMA), known as the Blacks Fork. The Proposed Action is for underground mining with no surface disturbance; therefore, there will be no effect to the Greater Sage-grouse (*Centrocercus urophasianus*).

The finding is based on the context and intensity of the project as described:

Context

The competitive sodium lease sale will affect land located adjacent to lands being leased and mined by two companies. Tata's current leases border the sale tract on the north, east, and south of Section 12. The sale of the sodium lease will provide access to the federal minerals in Section 12 and allow for the development of the trona resources in that area in an efficient and economic manner. If the federal resources are not leased it is unlikely that Tata would be able to economically mine the Section 12 resources once current operations move away from these lands. It may be possible that another operator, without a lease adjacent to the sale tract, could mine the Section 12 resources in the future; however, it is unlikely due to the existing surrounding leases and depth of the trona reserves. The development costs for a new operator to come to Section 12, construct an access shaft, a ventilation/secondary escape shaft, install surface and underground support facilities, begin mining, and process the trona would not provide the return on investment to make the venture viable under current market conditions.

Mining the trona in Section 12 is anticipated to take approximately 9 years, beginning in 2018 and ending in 2027. There are four mining areas and associated mining equipment that would be used: mains development, panel development, advance and retreat, and advance only. Based on the proposed room and pillar mining method and equipment to be used, approximately 30 to 35 percent of the trona would be mined.

Intensity

1. *Impacts that may be both beneficial and adverse.*

The Proposed Action and No Action Alternative would affect resources as described in Section 3 of the EA. There would be beneficial impacts to both direct and indirect employment, and there would be new and continued tax revenues and royalties to local, state, and federal governments. Adverse impacts include the development of approximately 30-35 percent of the trona resources, leaving 65-70 percent to support the existing ground surface and features. In addition, air emissions would continue for the additional length of time for mining in Section 12.

2. The degree to which the proposed action affects public health and safety.

Section 12 is located in a rural landscape with adjacent mining operations in progress, and all mining operations would occur underground. No aspect of the Proposed Action would have an effect on public health and safety.

3. Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

No park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas will be affected under the Proposed Action. Mining activities would take place underground and surface subsidence is expected to be minimal. No formal cultural studies have been performed in Section 12; however, background research in the general vicinity of the proposed lease area indicates undocumented cultural resources may be present. However, since no surface disturbance is expected and minimal subsidence may occur, the Proposed Action has no potential to affect known cultural resources or historic properties. No known TCPs or Native American Religious Concerns are present.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effect of the Proposed Action on the quality of the human environment will not be controversial. Sodium leasing is common in the area. In addition, during the public scoping period, the BLM received two comment letters. One letter was from the Green River Wyoming Chamber supporting the project because of the beneficial financial impacts for the local and regional economy. The other letter was from the Wyoming Game and Fish Department expressing their lack of concern for potential impacts from the Proposed Action.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The lease sale is not unique or unusual, and the BLM has extensive experience implementing similar actions in the area. Trona mining in the area has been ongoing for decades.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

This project neither establishes a precedent nor represents a decision in principle about future actions. The Proposed Action was considered in the context of past, present, and reasonably foreseeable future actions. The Proposed Action is not unusual and significant impacts are not expected.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

It is not anticipated that the approval of the Proposed Action will create any cumulative effects in conjunction with any other past, present, or reasonably foreseeable future projects.

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.*

Under the Proposed Action, no impacts to cultural resources or historic properties are expected. The Proposed Action would take place underground at depths ranging between approximately 1,270 and 1,450 feet beneath the ground surface and access to the proposed lease area would be provided approximately 10 miles away. Therefore, no surface disturbance is expected. Minimal subsidence (i.e., less than 1 inch to a maximum subsidence of 3 inches) is expected to occur; however, the surface would be monitored annually for subsidence and reported to the Wyoming Department of Environmental Quality (WDEQ) – Land Quality Division (LQD). If subsidence occurs, cultural resources are not anticipated to be impacted as the depth of the mining is so deep that subsidence does not show up at the surface as a sharp feature. The Proposed Action has no potential to affect known cultural resources or historic properties.

9. *The degree to which the action may adversely affect an endangered species or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

It was determined through internal and external scoping that there is no potential for the Proposed Action to adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The Proposed Action is consistent with all Federal, State, local laws, and requirements imposed for the protection of the environment.

Authorized Official: William A. Mier
William A. Mier
Field Manager
BLM, Kemmerer Field Office

12/3/15
Date