

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 40-9091; NRC-2011-0148]**

**Strata Energy, Inc, Kendrick Expansion Area *In Situ* Uranium Recovery Project**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Intent to prepare a supplemental environmental impact statement and conduct a scoping process; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) received a license amendment application for License SUA-1601, by letters dated March 20, 2015, and April 24, 2015, from Strata Energy, Inc. (Strata). The amendment application requested authorization to expand its Ross *In Situ* Uranium Recovery (ISR) Project (Ross) to include the Kendrick expansion area (Kendrick). The requested amendment would allow Strata to construct and operate additional uranium recovery wells at Kendrick. Kendrick covers approximately 3,186 hectares (7,784 acres) adjacent to Ross. Ross is located in Crook County, Wyoming, 43 kilometers (27 miles) northeast of Gillette, Wyoming and 46 kilometers (29 miles) northwest of Sundance, Wyoming. A notice of license amendment request and opportunity to request a hearing was published in the *Federal Register* on February 29, 2016.

**DATES:** The scoping period begins March 8, 2016 and ends April 22, 2016.

**ADDRESSES:** Please refer to Docket ID **NRC-2011-0148** when providing scoping comments or contacting the NRC about the availability of information regarding this document. You may submit scoping comments by the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2011-0148**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **Mail comments to:** Cindy Bladey, Office of Administration, Mail Stop: OWFN-12-H08, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

- **Email Comments to:** You may e-mail scoping comments to the Project's e-mail address: [KendrickSEIS@nrc.gov](mailto:KendrickSEIS@nrc.gov).

Comments must be submitted by April 22, 2016 to ensure consideration. For additional direction on accessing information and submitting comments, see "Obtaining Information and Submitting Comments" in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Jessie Muir Quintero, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington DC, 20555-0001; telephone: 301-415-7476; e-mail: [Jessie.Muir-Quintero@nrc.gov](mailto:Jessie.Muir-Quintero@nrc.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Obtaining Information and Submitting Comments**

#### **A. Obtaining Information**

Please refer to Docket ID **NRC-2011-0148** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this action by the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2011-0148**.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in a table in the section of this notice entitled, Availability of Documents.

- **NRC'S PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

- **Project Webpage:** Information related to the Kendrick project can be accessed on the NRC's Kendrick Project Web page at: <http://www.nrc.gov/materials/uranium-recovery/license-apps/kendrick.html>.

## B. Submitting Comments

Please include Docket ID **NRC-2011-0148** in your comment submission. Written comments may be submitted during the 45-day scoping period as described in the ADDRESSES section of the document.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC posts all comment submissions at <http://www.regulations.gov> as well as entering the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

## **II. Background**

On April 24, 2014, the NRC staff issued Strata a source and byproduct material license, SUA-1601, pursuant to part 40 of title 10 of the *Code of Federal Regulations* (10 CFR). License SUA-1601 authorizes Strata to construct and operate its Ross ISR project, which includes ISR wellfields, a central processing plant (CPP), and ancillary facilities within the 696-hectare (1,721-acre) Ross site located in Crook County, Wyoming. Prior to granting Strata SUA-1601, the NRC staff conducted an environmental review of the proposed project and issued a Supplemental Environmental Impact Statement (SEIS) for the Ross ISR Project (Ross SEIS, NUREG-1910, Supplement 5), in February 2014. The Ross SEIS tiered off the ISR Generic Environmental Impact Statement (GEIS, NUREG-1910).

By letters dated March 20, 2015, and April 24, 2015, Strata requested that the NRC amend License SUA-1601. The requested amendment, if granted, would expand the area of ISR activities to include the Kendrick expansion area, which is adjacent to Ross, and allow Strata to construct and operate additional uranium ISR wellfields at Kendrick.

The NRC accepted the license amendment application for technical review on January 14, 2016, and published a notice of opportunity to request a hearing in the *Federal Register* on February 29, 2016 (81 FR 10285). Strata's license amendment application, including

an Environmental Report, can be found on the NRC's Kendrick project webpage at:

<http://www.nrc.gov/materials/uranium-recovery/license-apps/kendrick.html>.

The purpose of this notice is to: (1) inform the public that the NRC staff will prepare a SEIS to the GEIS as part of its review of the license amendment request, and (2) provide the public with an opportunity to participate in the environmental scoping process as defined in 10 CFR 51.29.

### **III. Environmental Review**

Although the NRC typically prepares Environmental Assessments for source material license amendments, the NRC staff is preparing a SEIS for Kendrick because the Ross SEIS identified several potential significant impacts related to historic and cultural resources, groundwater, transportation, and visual resources. Therefore, the NRC has considered it prudent to prepare a SEIS for this particular license amendment. The SEIS for Kendrick will be prepared pursuant to the NRC's regulations that implement NEPA. These regulations are located in "10 CFR part 51."

The Kendrick SEIS will examine the potential environmental impacts of the proposed construction, operation, decommissioning, and aquifer restoration of the Kendrick expansion area. The Kendrick SEIS will tier from and incorporate by reference the GEIS and the Ross SEIS. The techniques of tiering and incorporation by reference are described in 40 CFR 1502.20 and 1508.28, and 40 CFR 1502.21, respectively, of the Council on Environmental Quality's NEPA regulations. Accordingly, the SEIS will rely on information and analyses in the GEIS and Ross SEIS where appropriate and focus its more detailed discussions on the issues specific to Kendrick.

The SEIS will analyze potential impacts of the proposed action on historic and cultural resources. In accordance with 36 CFR 800.8, the NRC staff is using the NEPA process to comply with its obligations under Section 106 of the National Historic Preservation Act. The NRC initiated Section 106 consultations beginning in July 2015, with 26 Indian Tribes, the U.S. National Park

Service – Devils Tower, the U.S. Bureau of Land Management (BLM), the Advisory Council on Historic Preservation, and the Wyoming State Historic Preservation Office.

In parallel with the environmental review, the NRC will be conducting a safety review. Its findings will be published in a Safety Evaluation Report.

#### **IV. Kendrick Expansion Area**

The NRC's Federal action is to either grant or deny Strata's request for a license amendment. If the NRC approves Strata's request to amend License SUA-1601, then Strata could proceed with the proposed project – the Kendrick expansion – as described in its license amendment application. With this expansion, Strata would extract uranium from the ore body at Kendrick through the ISR process.

The ISR process involves the mobilization of uranium from the mineralized host sandstone rock by pumping native groundwater containing oxidants (oxygen or hydrogen peroxide) and other chemical compounds (e.g., sodium bicarbonate) through a series of injection wells, passing the fluids through the ore body and then being extracted to the surface through a series of production wells. After extraction, the solution, called "lixiviant," would be transported by pipelines to the Ross CPP for processing. Strata does not propose to construct or operate processing plants at Kendrick. After removal of the uranium by an ion-exchange process at the Ross CPP, the resulting solution would be transported back to Kendrick by pipeline for re-use in ISR operations. Uranium removed at the Ross CPP would be further processed to produce "yellowcake," either at the Ross CPP should the dryers be installed in the future or through the transfer of uranium-bearing resins for processing at another licensed facility. The yellowcake would then be shipped to a uranium conversion facility which is the next step in the fuel cycle process for developing fuel for commercial nuclear power plants. Kendrick wellfields that have completed operations would be decommissioned and the affected aquifers restored concurrently with operation of other active wellfields.

## **V. Alternatives to be Evaluated**

The Kendrick SEIS will analyze the environmental impacts of the proposed action, the no-action alternative, and reasonable alternatives. A brief description of each is provided below.

*No-Action*—The no-action alternative would be to deny the license amendment application. Under this alternative, the NRC would not issue the license amendment and no ISR activities would occur at Kendrick. This serves as a baseline for comparison.

*Proposed action*—The proposed Federal action is to issue a license amendment authorizing the expansion of Ross ISR activities to Kendrick. If the NRC approves the amendment request, it would issue Strata an amended license (SUA-1601) under the provisions of 10 CFR Part 40, and Strata would proceed with the proposed activities at Kendrick as described in its license amendment application and summarized in Section IV.

*Alternatives*—In its Environmental Report, Strata identified a potential alternative involving the construction of a satellite ion-exchange facility within Kendrick. Under this alternative, lixiviant from the proposed Kendrick wellfields would be pumped to a satellite facility within Kendrick rather than to the Ross CPP. At the Kendrick satellite facility, uranium would be extracted in ion-exchange columns and transported to either the Ross CPP or another licensed facility for processing into yellowcake. Other alternatives not listed here may be identified during scoping or through the environmental review process.

## **VI. Scope of the Environmental Review**

The NRC will first conduct a scoping process for the SEIS and as soon as practicable thereafter, will publish a draft SEIS, pursuant to the NRC's NEPA regulations at 10 CFR part 51, for public comment. The NRC staff is conducting a 45-day scoping process for the Kendrick SEIS. The purpose of this scoping process is to seek public input to help the NRC determine the appropriate scope of the SEIS, including the alternatives and significant environmental issues to be

analyzed in depth, as well as those that should be eliminated from detailed study because they are peripheral or are not significant. The NRC staff is planning to publish information related to this action in newspapers serving communities near the Kendrick site, requesting information and comments during the scoping period from the public. At this time, the NRC is not planning to hold a public scoping meeting. The NRC will prepare a concise summary of its scoping process, the comments received, as well as the NRC's responses. The Scoping Summary Report will be included in the draft SEIS as an appendix and sent to each participant in the scoping process for whom the staff has an address.

The Kendrick SEIS will cover the potential impacts from all project phases: construction, operations, aquifer restoration, and decommissioning. The scope of the Kendrick SEIS will consider both radiological and nonradiological (including chemical) impacts associated with the proposed project and its alternatives. The Kendrick SEIS will also consider unavoidable adverse environmental impacts, the relationship between short-term uses of resources and long-term productivity, and irreversible and irretrievable commitments of resources. The following resource areas have been tentatively identified for analysis in the Kendrick SEIS: land use, transportation, geology and soils, water resources, ecological resources, air quality and climate change, noise, historical and cultural resources, visual and scenic resources, socioeconomics, public and occupational health, waste management, environmental justice, and cumulative impacts. This list is not intended to be exhaustive, nor is it a predetermination of potential environmental impacts. The Kendrick SEIS will describe the NRC's approach and methodology undertaken to determine the resource areas that will be studied in detail.

The NRC encourages members of the public, local, State, Tribal, and Federal government agencies to participate in the scoping process. Written comments may be submitted during the 45-day scoping period as described in the ADDRESSES and SUPPLEMENTARY INFORMATION section of this document. To ensure that comments will be considered in the scoping process, written comments must be postmarked or delivered by April 22, 2016. The NRC staff may, at its



discretion, consider comments after the end of the comment period. Participation in the scoping process for the Kendrick SEIS does not entitle participants to become parties to any proceeding to which the SEIS relates.

In addition to requesting scoping comments through this *Federal Register* notice, the NRC staff also intends to reach out to interested parties, including those identified during the environmental review for the Ross SEIS, as well as other Federal and State agencies and Indian Tribes identified during the Kendrick SEIS process. The NRC staff seeks to identify, among other things, all review and consultation requirements related to the proposed action, and agencies with jurisdiction by law or special expertise with respect to any environmental impact involved or which is authorized to develop and enforce relevant environmental standards. The NRC invites such agencies to participate in the scoping process and, as appropriate, cooperate in the preparation of the SEIS.

The BLM has accepted the NRC's request to participate as a cooperating agency in the preparation of the SEIS. The BLM has expertise in mineral management and was a cooperating agency for the Ross SEIS. The agencies will cooperate according to the process set forth in the memorandum of understanding signed by the NRC and BLM and published in the *Federal Register* on April 01, 2013 (78 FR 19540).

The NRC will continue its environmental review of Strata's license amendment application and, as soon as practicable, the NRC and its contractor will prepare and publish a draft SEIS. The NRC currently plans to have a 45-day public comment period for the draft SEIS. Availability of the draft SEIS and the dates of the public comment period will be announced in a future *Federal Register* notice. The final SEIS will include responses to public comments received on the draft SEIS.

## VII. Availability of Documents

The documents identified in this *Federal Register* notice are accessible to interested persons by the means indicated in either the **Supplementary Information** section of this notice or in the table below.

DOCUMENT	ACCESS
NUREG-1910, Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities (GEIS)	<a href="http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1910/">http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1910/</a>
NUREG-1910, Supplement 5, Environmental Impact Statement for the Ross ISR Project in Crook County, Wyoming (Ross SEIS)	ML14056A096 or <a href="http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1910/s5/">http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1910/s5/</a>
Memorandum of Understanding between NRC and BLM	78 FR 19540
<i>Federal Register</i> Notice of License Amendment Request and Opportunity to Request a Hearing	(81 FR 10285)
Strata Energy, LLC's Source Materials License SUA-1601 and Amendments	ML14069A315, ML15181A246, and ML15202A143 or <a href="http://www.nrc.gov/info-finder/materials/uranium/licensed-facilities/ross.html">http://www.nrc.gov/info-finder/materials/uranium/licensed-facilities/ross.html</a>
Kendrick License Amendment Application	ML15096A141 and ML15152A154 or <a href="http://www.nrc.gov/materials/uranium-recovery/license-apps/kendrick/kendrick-app-docs.html">http://www.nrc.gov/materials/uranium-recovery/license-apps/kendrick/kendrick-app-docs.html</a>

Dated at Rockville, Maryland, this 1<sup>st</sup> day of March, 2016.

For the Nuclear Regulatory Commission.

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Craig G. Erlanger, Acting Director,  
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and Environmental Review  
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