

July 23, 2015

Mr. Michael Griffin
Vice President of Permitting, Regulatory
and Environmental Compliance
Strata Energy, Inc.
PO Box 2318
Gillette, WY 82717-2318

SUBJECT: STAFF'S COMMENTS ON SUBMITTAL REGARDING LICENSE CONDITION
12.9, ROSS ISR PROJECT, CROOK COUNTY, WY, SOURCE MATERIAL
LICENSE SUA-1601, DOCKET NO. 040-09091, TAC J00735

Dear Mr. Griffin:

By letter dated February 13, 2015, Strata Energy, Inc. (Strata) submitted information that addresses license condition 12.9 of its Materials License SUA-1601, which states:

12.9 Prior to the preoperational inspection, the licensee shall submit to the NRC staff, for review and verification, procedures by which it will ensure that unmonitored employees will not exceed 10 percent of the dose limits in 10 CFR 20, Subpart C.

The NRC staff has completed its technical review of the information and provides the enclosed comments. Upon receipt of Strata's reply, the staff will continue its evaluation and notify Strata in writing of its results.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure" a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions regarding this action, please contact me at 301-415-0697 or by e-mail at john.saxton@nrc.gov.

Sincerely,

/RA/

John Saxton, Hydrogeologist
Uranium Recovery Licensing Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket No.: 040-09091
License No.: SUA-1601

Enclosure: Comments on Strata's February 13, 2015 letter

cc: D. Schellinger WDEQ

If you have any questions regarding this action, please contact me at 301-415-0697 or by e-mail at john.saxton@nrc.gov.

Sincerely,

/RA/

John Saxton, Hydrogeologist
Uranium Recovery Licensing Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket No.: 040-09091
License No.: SUA-1601

Enclosure: Comments on Strata's February 13, 2015 letter

cc: D. Schellinger WDEQ

DISTRIBUTION: RKellar/RIV LGersey/RIV

ML15190A154

OFC	DUWP	DUWP	DUWP	DUWP	DUWP	DUWP
NAME	DBrown	RBurrows	JSaxton	SAchten	BVonTill	JSaxton
DATE	7/9/15	7/15/15	7/16/15	7/20/15	7/22/15	7/23/15

OFFICIAL RECORD COPY

NRC Staff Comments on Strata Energy, Inc., Letter Dated February 13, 2015
Preoperational License Conditions 12.9
Materials License SUA-1601; Docket No. 040-09091

Background

By letter dated February 13, 2015, Strata Energy, Inc., (Strata) provided its responses to preoperational license condition 12.9 of Materials License SUA-1601 (Strata 2015), which states:

- 12.9 Prior to the preoperational inspection, the licensee shall submit to the NRC staff, for review and verification, procedures by which it will ensure that unmonitored employees will not exceed 10 percent of the dose limits in 10 CFR 20, Subpart C.

In its letter dated February 13, 2015, Strata provided a description of its program for ensuring that unmonitored employees will not receive an occupational dose greater than 10 percent of the dose limits in 10 CFR Part 20, Subpart C (Strata 2015). Strata explained that it will monitor occupational dose for all full time employees on at least a quarterly basis during the first year of uranium production operations and analyze the exposure data after the first year, using individual employees or groups of employees that have similar duties.

The monitored exposures will include both routine exposures covered by Standard Operating Procedures (SOPs) and non-routine exposures covered under Radiation Work Permits (RWPs). Strata stated that quarterly monitoring will be continued after the first year for groups that exceed 10 percent of the dose limits. Strata explained that the Radiation Safety Officer will conduct an annual review to determine which groups should be monitored each year.

Comment No. 1 - Clarification of TEDE

Strata stated in the first paragraph of its Attachment to its February 13, 2015, letter that, "The TEDE [total effective dose equivalent] will be a summation of the external exposure or deep dose equivalent determined in accordance with TR [Technical Report] Section 5.7.2.3, 'Personal Dosimetry.'"

Comment: Please clarify that the TEDE is a sum of the effective dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).

Comment No. 2 – Determination of CEDE for Workers Outside of CPP

Strata did not explain how it would determine committed effective dose equivalent (internal exposures) for groups that work outside the Central Processing Plant (CPP). This is related to License Condition 12.7(C), which requires Strata to discuss how it will account for occupational dose throughout the entire License Area (i.e., outside the Central Processing Plant) for employees for whom individual monitoring is required in accordance with 10 CFR 20.1502.

Comment: Please explain how it will determine the committed effective dose equivalent (internal exposures) for groups that work outside the Central Processing Plant.

Comment No. 3 – Procedures for Unmonitored Employees

Strata also explained that it will determine external exposures using personal monitoring devices (either thermoluminescent dosimeters or optically-stimulated luminescent dosimeters). It will also conduct surveys of general area gamma dose rates. Strata will determine internal exposures using either air sample results or bioassays, as described in TR Sections 5.7.3 and 5.7.4, but only for in-plant exposures. Strata also stated, “Since there will be no yellowcake processing or drying at the Project, the airborne uranium monitoring results will use Solubility Class D DAC’s for dose calculations.” This statement contradicts a previous commitment in TR Section 5.7.4.1, in which Strata stated, “However, at startup, Strata will consider the Ross ISR product ICRP 19/30 solubility Class W until its molecular composition has been characterized to demonstrate similarities with the other ISR products for which definitive solubility data has been reported (see Metzger et al. 1997 and Tairova et al. 2010).” (Strata 2011).

Comment No. 3: Please revise the program description of procedures by which it will ensure that unmonitored employees will not exceed 10 percent of the dose limits in 10 CFR 20, Subpart C to be consistent with statements in the TR that Strata will use the DAC for uranium for pulmonary retention class W.

References

Strata (Strata Energy Inc.). 2011. Letter from M. Griffin to K. McConnell (NRC), License Application for Ross In Situ Leach Uranium Recovery Project Site. ADAMS Accession No. ML110120063.

Strata (Strata Energy Inc.). 2015. Letter from M. Griffin to NRC, dated February 13, 2015, regarding “Strata Energy Ross In Situ Recovery Project, Source Materials License SUA-1601, Docket No. 040-09091, License Condition 12.9.” ADAMS Accession No. ML15069A438.