April 6, 2010

Mr. John W. Cash Manager EHS and Regulatory Affairs Lost Creek ISR, LLC 5880 Enterprise Drive, Suite 200 Casper, WY 82609

SUBJECT: REQUEST FOR EXEMPTION FROM 10 CFR 40.32(E), LOST CREEK ISR, LLC,

LOST CREEK IN SITU RECOVERY FACILITY, SWEETWATER COUNTY,

WYOMING (TAC J00595)

Dear Mr. Cash:

By letter dated July 2, 2009, Lost Creek ISR, LLC (LCI) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for an exemption from the "commencement of construction" provisions in 10 CFR 40.32(e). This request was submitted in accordance with 10 CFR 40.14, which allows the NRC to issue exemptions to the specific regulations in Part 40, upon a finding that the exemption is authorized by law and will not endanger life, property, or the common defense and security, and is otherwise in the public interest. NRC staff has reviewed this exemption request and approves it, in part. Enclosure 1 is the Technical Evaluation Report (TER) that discusses the NRC staff's analysis and specifies those activities that are approved under this exemption. This TER also contains the conditions under which this exemption is granted. Enclosure 2 is the final Environmental Assessment for this action performed pursuant to 10 CFR 51.21.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," 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.

J. Cash 2

If you have any questions regarding this matter, please contact Ms. Tanya Oxenberg at 301-415-6142 or, by email, at tanya.oxenberg@nrc.gov.

Sincerely,

/RA/

Keith I. McConnell, Deputy Director
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management and
Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

Docket No.: 40-9068

Enclosures:

1. Technical Evaluation Report

2. Final Environmental Assessment

cc: W. Heili, LCI

B. Boberg, LCI

M. Thiesse, WDEQ

M. Newman, BLM

D. McKenzie, WDEQ

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DATE	12/16/09	12/2/09	12/17/09	2/8/10	2/18/10	03/11/10
OFC	DWMEP	DWMEPV	DWMEP	DWMEP		
NAME	PBubar	KMcConnell	LCamper	KMcConnell		
DATE	03/16/10	03/15/10	3/24/10	4/6/10		

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TECHNICAL EVALUATION REPORT LOST CREEK ISR, LLC LOST CREEK URANIUM RECOVERY FACILITY 10 CFR 40.14 EXEMPTION REQUEST

DOCKET NO. 040-9068

LICENSE NO. NA

DATE: March 25, 2010

FACILITY: Lost Creek ISR, Sweetwater County, Wyoming

TECHNICAL REVIEWER: Stephen J. Cohen

PROJECT MANAGER: Tanya P. Oxenberg

SUMMARY AND CONCLUSIONS:

By letter dated July 2, 2009, Lost Creek ISR, LLC (LCI) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for an exemption from the "commencement of construction" provisions in 10 CFR 40.32(e) (LCI, 2009). This request was submitted per 10 CFR 40.14, which allows the NRC to issue exemptions to the specific regulations in Part 40 as are authorized by law and will not endanger life, property, or the common defense and security, and are otherwise in the public interest. The July 2, 2009, submittal lists 10 activities for which a 10 CFR 40.32(e) exemption is sought. NRC staff has reviewed this exemption request and approves it, in part. Specifically, the NRC approves the requested exemption, except for the following: (a) the activities pertaining to the processing plant that are included in activity No. 2 - Construction of the Plant and Maintenance Buildings; and (b) all of activity No. 9 – Drill and Case up to Four Deep Wells.

BACKGROUND

Paragraph 40.32 (e) in 10 CFR 40 states in relevant part that a uranium milling license application will be approved if, before the commencement of construction, the NRC staff concludes, on the basis of evaluations made pursuant to 10 CFR Part 51, that the action called for is the issuance of the proposed operating license. The regulation further states that commencement of construction prior to this conclusion "is grounds for denial of a license." The regulation specifies activities that are not a prohibited "commencement of construction," including site exploration, construction of roads to support exploration, borings to determine foundation conditions, and preconstruction monitoring or testing to establish site background conditions.

On October 6, 2007, the NRC published regulations to allow limited work authorizations for applicants applying for licenses under 10 CFR Part 50 (FR 72 57416). This October 2007 rulemaking added a definition of "construction" in 10 CFR 51.4, which includes a list of activities that are not considered construction. This list is not consistent with the "commencement of construction" provisions in §40.32(e), as discussed further in the environmental assessment prepared in conjunction with this technical analysis.

Per the Commission's direction in Staff Requirements Memorandum M081211, the NRC staff is developing a rule that, if approved by the Commission, will resolve the inconsistencies between §40.32(e) and §51.4. Unless and until this rulemaking results in a final rule, the NRC staff will review exemption requests to determine whether proposed site preparation activities have a nexus to radiological health and safety. Any activity that exhibits such a nexus cannot be conducted before an operating license is issued.

TECHNICAL ANALYSIS

As indicated above, the LCI exemption request contains a set of 10 proposed site preparation activities. In its technical analysis, the NRC staff considered whether or not each requested activity was within the scope of those activities not considered "construction" in paragraph (2) of the 10 CFR 51.4 definition. If a requested activity falls within the scope of what is not construction under §51.4, the staff's view is that such activity may properly be exempted from the commencement of construction requirements in §40.32(e). As discussed below, some of the proposed site preparation activities have a nexus to radiological health and safety and are regulated by the NRC under the Atomic Energy Act. Exemption requests for actions having a nexus to radiological health and safety are denied.

1. Leveling and surfacing of the area around the Plant and Maintenance Building

This proposed activity consists of leveling and surfacing the area that the Plant and Maintenance Buildings would later occupy if an operating license is issued to LCI. LCI proposes to remove topsoil from the entire proposed 3.8-acre area, which will be stockpiled per the U.S. Bureau of Land Management (BLM) and the Wyoming Department of Environmental Quality (WDEQ) requirements. LCI will then surface the entire area with 3 inches of compacted gravel. This activity falls within the scope of the site preparation activities set forth in paragraph (2)(iii) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts this activity from the commencement of construction provisions of §40.32(e).

2. Construction of the Plant and Maintenance Buildings

Construction of maintenance buildings, with their associated berms and sumps (as described in the Lost Creek license application) is approved, as is construction of the office building, including its electrical, plumbing and heating, ventilation, and air conditioning (HVAC) systems. Such activities are within the scope of the non-safety related construction activities set forth in paragraph (2)(vi) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts this portion of Activity 2 from the commencement of construction provisions of §40.32(e).

However, construction of the processing plant has a nexus to radiological health and safety. The processing plant serves to concentrate, precipitate, and dry yellowcake, and its construction has a direct nexus to radiological health and safety because radioactive materials will be processed there. Specific aspects of processing plant construction are, therefore, subject to review and approval by NRC staff, and such construction is not approved as an exempted activity.

3. Installation of household septic systems for the Plant and Maintenance Buildings

This activity includes installing the septic systems for the proposed maintenance and plant buildings for sanitary waste outside the aforementioned buildings. Such sanitary sewerage activities are within the scope of the non-safety related construction activities set forth in paragraph (2)(vii) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts these activities from the commencement of construction provisions of §40.32(e).

4. Installation of a Fence around the Plant and Maintenance Building Area

This activity involves installing a fence to enclose the proposed plant and maintenance building compound. The area enclosed by the fence will be approximately 750 ft by 850 ft and will be used to restrict vehicular, livestock, and large regional wildlife access to the processing plant area. Such fencing activity is within the scope of the non-safety related construction activities set forth in paragraph (2)(iv) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts this activity from the commencement of construction provisions of §40.32(e).

5. Upgrading the Existing Road Access from the West to the Plant

LCI proposes to upgrade a road from Wamsutter-Crooks Gap Road to the plant gate, drill shed, and staging area. This upgrade will cover 4.6 miles of two-track, all terrain vehicle (ATV) trail that will be upgraded to the BLM functional classification of "Local" for "Level and Rolling" terrain per the BLM Manual, Section 9113 (BLM, 2008). This activity is within the scope of the non-safety related construction activities set forth in paragraph (2)(iii) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts this activity from the commencement of construction provisions of §40.32(e).

6. Upgrading the Existing Road Access from the East to the Plant

LCI proposes to upgrade a road from BLM Road 3215 or Sooner Road to the plant gate, drill shed, and staging area. This upgrade will cover 4.8 miles of two-track, ATV trail that will be upgraded to a BLM functional classification of "Local" for "Level and Rolling" terrain per the BLM Manual, Section 9113 (BLM, 2008). This activity is within the scope of the non-safety related construction activities set forth in paragraph (2)(iii) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts this activity from the commencement of construction provisions of §40.32(e).

7. Installation of a Fence for Early Wellfield Area

LCI proposes a fence to enclose the first wellfield area, which would occupy approximately 95 acres if an operating license is issued to LCI. The purpose of the fence is to restrict vehicular, livestock, and large regional wildlife access to the wellfield. Such fencing activity is within the scope of the non-safety related construction activities set forth in paragraph (2)(iv) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts this activity from the commencement of construction provisions of §40.32(e).

8. Installation of a Power Line to the Plant and Maintenance Buildings and Drillers Shed

The proposed power line will consist of 10,800 feet of overhead line rated for 34,500 volts. Construction will be consistent with all local requirements for raptor protection, as well as other local species of interest. The line will be located along the western license boundary. Such transmission line installation is within the scope of the non-safety related construction activities set forth in paragraph (2)(vii) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts this activity from the commencement of construction provisions of §40.32(e).

9. <u>Drilling and Casing Up to Four Deep Wells</u>

LCI proposes to drill the borings and case up to four deep wells that would later be used during licensed ISR operations to dispose of liquid 11e.(2) byproduct material. LCI does not propose to install any equipment associated with the injection of liquid waste into the wells. Construction of any structure or system to manage waste, such as these deep disposal wells, has a nexus to radiological health and safety. Such construction is subject to NRC staff review under 10 CFR 20.2002, since LCI plans to use these proposed wells to dispose of liquid 11e.(2) byproduct material. Paragraph (a) of 10 CFR 20.2002 requires the NRC to perform a "risk evaluation," and §20.2002(d) requires that doses be kept ALARA. Therefore, Activity 9 is not approved as an exempted activity. The NRC staff notes that installation of Class I disposal wells is also subject to authorization by the Wyoming Department of Environmental Quality.

10. Construction of a Drillers Shed and Staging Area

LCI proposes to construct a drillers shed and staging area. The shed will be a 40-ft x 40-ft structure, and the staging area will be 1.2 acres. A fence will be constructed around the staging area to limit access. Such construction and fencing activity is within the scope of the non-safety related construction activities set forth in paragraphs (2)(iv) and (2)(vi) of the 10 CFR 51.4 definition of construction. Therefore, the NRC staff exempts these activities from the commencement of construction provisions of §40.32(e).

CONDITIONS OF EXEMPTION

The NRC staff acknowledges that site preparation construction activities could affect certain cultural, historical, and wildlife resources. Therefore, the staff's approval of the aforementioned site preparation activities is based on the understanding that the applicant will conduct the proposed activities consistent with the following:

All construction associated with the proposed development will be completed in compliance with the National Historic Preservation Act of 1966 (as amended) and its implementing regulations (36 CFR Part 800), and the Archaeological Resources Protection Act of 1979 (as amended) and its implementing regulations (43 CFR Part 7). In order to ensure that no unapproved disturbance of cultural resources occurs, any work resulting in the discovery of previously unknown cultural artifacts shall cease. The artifacts shall be inventoried and evaluated in

- accordance with 36 CFR Part 800, and no disturbance shall occur until the Applicant has received authorization from NRC to proceed.
- 2. All construction restrictions will be adhered to, as required by the Wyoming Department of Environmental Quality, the U.S. Bureau of Land Management, and the U.S. Fish and Wildlife Service regarding disturbances to endangered species habitat.

CONCLUSIONS

As discussed above, the NRC staff is granting exemptions for those activities that fall within the scope of the non-safety related activities set forth in paragraph (2) of the 10 CFR 51.4 definition of construction. Specifically, the site preparation activities set forth in LCI exemption requests numbered 1, 3, 4, 5, 6, 7, 8, and 10 are exempted from the "commencement of construction" provisions in 10 CFR 40.32(e). LCI exemption request number 2 is granted in part and denied in part. LCI exemption request number 9 is denied.

The exemptions being granted are authorized by law and will not endanger life, property, or the common defense and security, and are otherwise in the public interest. The exemptions being granted are thus in accordance with 10 CFR 40.14.

REFERENCES

Lost Creek ISR, LLC; Exemption Request to Allow Pre-Licensing Activities; (ADAMS Accession No. ML091940438).