July 23, 2013

Mr. Scott R. Surovchak, Site Manager U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION – DRAFT LONG TERM SURVEILLANCE PLAN FOR THE WESTERN NUCLEAR SPLIT ROCK WYOMING SITE

Dear Mr. Surovchak:

By letter dated April 12, 2012, U.S. Department of Energy Office of Legacy Management, submitted its Draft Long-Term Surveillance Plan for the Split Rock, Wyoming facility to the U.S. Nuclear Regulatory Commission (NRC) staff for review and approval. Upon reviewing this submittal, the NRC staff has identified several items that require further clarification in order for the staff to complete its review. The NRC staff's comments are contained in the enclosure.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," 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 matter, please contact me at (301) 415 6712, or by e-mail, at <u>james.shepherd@nrc.gov</u>.

Sincerely,

/**RA**/

J. C. Shepherd, Project Engineer Reactor Decommissioning Branch 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 1162 License No.: SUA 56

Enclosure: Request for Additional Information Mr. Scott R. Surovchak, Site Manager U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503

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Enclosure: Request for Additional Information

OFC	DWMEP	DWMEP	DWMEP	DWMEP	DWMEP
NAME	JShepherd	SAchten	JShepherd for NOrlando	BWatson	JShepherd
DATE	7/22/13	7/22/13	7/23/13	7/23/13	7/23/13

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PRELIMINARY TECHNICAL REQUEST FOR ADDITIONAL INFORMATION DRAFT LONG-TERM SURVEILLANCE PLAN SPLIT ROCK, WY

General

The whole ground water monitoring program will require significant interaction among the U.S. Nuclear Regulatory Commission (NRC), the U.S. Department of Energy (DOE) and its contractors, and Western Nuclear Inc. (WNI) to finalize, and is not addressed in this request.

Administrative

- Section 2.3.4 of the draft Long-Term Surveillance Plan (LTSP) states: "The centerline of the meandering course of the Sweetwater River defines the site's northern boundary." Page A-3, Legal Description states: "...boundary follows the southerly bank of the Sweetwater River" The LTSP should have a single definition of the site boundary.
- 2. Figure 2 of the LTSP shows perimeter markers on the north side of the Sweetwater River to the east of Ore Road, and on the east side of Ore Road. The legal site definition states the boundary is on the south bank of the River. DOE should verify the location of the signs along the river on the drawing.
- 3. On the southerly and easterly portions of the site, perimeter markers are on the institutional control (IC) boundary marking federal property. The LTSP should state why there are no perimeter markers NW of Ore Road to identify the IC boundary and the extent of the Federal property.

Covenants

- 1. The LTSP states DOE will verify that current land owners are aware of groundwater use restrictions. However, inspections are scheduled to be completed in 1 day. The LTSP should define how DOE will verify that landowners are aware of the groundwater use restrictions if the land owners are not present on inspection day.
- 2. There are three distinct covenants on separate private properties within the IC boundary. The LTSP describes one of these and appears to ascribe the attributes of it to all three. The LTSP should describe the attributes of each covenant separately.
- **3.** The LTSP should state what DOE believes would constitute non-compliance with each of the covenants, how it would determine if a non-compliance occurred, and what specific actions DOE will take in the event of non-compliance when each of the covenants is identified. The description should include the legal basis for any actions DOE plans on private property.
- 4. The covenants in Appendix A to the LTSP state there are no restrictions on water use for agriculture or stock watering either inside or outside the IC boundary. Section 2.5.3 of the LTSP states that "... provisions are provided for groundwater to be used for livestock, agriculture...." if the water meets Wyoming Department of Environmental Quality (WDEQ) standards. The LTSP should state how DOE will verify compliance with WDEQ standards, and what DOE will do to prohibit water use if those standards are not met.

5. Section E2.2 of the LTSP states "Any well within the federally-owned portion of the site that is considered for livestock watering under long-term care will be required to meet WDEQ Class III livestock standards." Well WN-24 is within the federally-owned portion of the site and will "...likely continue to be used for livestock watering under long-term management of the site, provided its water continues to meet WDEQ Class III livestock standards." WN-24 is not identified in Table 7 of the LTSP as a well DOE will sample. The LTSP should state how DOE will ensure compliance with WDEQ Class III livestock standards on Federal property, and what actions it will take if non-compliance is identified.

Cell

- 1. The LTSP identifies a seismic event that would result in a DOE response, but does not relate it to the seismic design of the cover or other site parameters.
- The LTSP states the cover is a water balance cover and requires no weed control. However, the LTSP does not include any site design or construction data to substantiate this assertion. DOE should provide the design information substantiating the assertion that the cover is a water balance cover.

Inspections

- The LTSP states DOE will conduct annual inspections, and will be on-site for one day. Table 5 states that one transect of the first inspection is the "site perimeter and balance of site..." plus ¼ mile beyond the boundary. The IC boundary of the site is more than 15 miles long, including some 300 – 400 foot near-vertical granite outcrops, and encompasses more than 6 square miles. The LTSP should clearly state exactly what the inspectors will do in order to perform the inspection of the site perimeter.
- 2. The LTSP should accurately state what will, and will not, be inspected, and how it will be inspected, on each inspection, not just the first inspection.
- **3.** DOE should clarify how DOE would inspect the area north of the Sweetwater River (boundary plus ¹/₄ mile) if something changes and appears to require evaluation.

Monitoring

1. Waiting for three successive exceedence events before action is undertaken to determine a course of action could pissibly result in no action for decades. This approach needs revision for infrequent sampling locations to ensure any plume migration is defined and corrective actions occur in a timely fashion.