

February 12, 2016

Mr. Scott Schierman
Sr. Health Safety and Environmental Specialist
Uranium One USA, Inc.
907 N. Poplar Street, Suite 260
Casper, Wyoming 82601

SUBJECT: URANIUM ONE, USA, INC., WILLOW CREEK PROJECT, CAMPBELL AND
JOHNSON COUNTIES, WYOMING, LICENSE SUA-1341, REQUEST FOR
ADDITIONAL INFORMATION, ANNUAL FINANCIAL ASSURANCE ESTIMATE
ADJUSTMENT (TAC NO. L00793)

Dear Mr. Schierman:

By letter dated August 18, 2015, Uranium One, USA, Inc. submitted its annual surety update for U.S. Nuclear Regulatory Commission (NRC) license SUA-1341 for its Willow Creek operations. The report was made publicly available on August 28, 2015, and was placed in the NRC's Agencywide Documents Access and Management System (ADAMS) and can be found at Accession Number ML15238A246.

The NRC staff has reviewed the financial assurance update and requires additional information from Uranium One, USA, Inc., in order to complete the review. The request for additional information is provided in the enclosure. Within 30 days, please either provide the information requested or inform us of the date you expect to provide the information. We are available to meet with you to discuss the requested information.

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 ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

S. Schierman

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If you have any questions concerning this letter, please contact me, either by telephone at (301) 415-7777, or by e-mail at Ron.Linton@nrc.gov.

Sincerely,

/RA/

Ron C. Linton, Project Manager
Uranium Recovery Licensing Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket No.: 040-08502

License No.: SUA-1341

Enclosure:
Request for Additional Information

cc: Luke McMahan, PG (WDEQ-LQD)

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cc: Luke McMahan, PG (WDEQ-LQD)

DISTRIBUTION: L. Gersey, RIV

R. Kellar, RIV

ADAMS Accession No.:

ML16029A344

***concurring via e-mail**

OFFICE	NMSS	NMSS	NMSS	NMSS	NMSS
NAME	R. Linton	S. Achten	R. Augustus*	B. VonTill	R. Linton
DATE	2/1/16	2/2/16	2/12/16	2/12/16	2/12/16

OFFICIAL RECORD COPY

Request for Additional Information (RAI)
Annual Financial Assurance Update for Uranium One, USA, Inc.,
Willow Creek Project, 2015-2016

RAI (1)

Description of Deficiency

As currently presented by Uranium One USA, Inc., (Uranium One), the surety estimate has not been adjusted to account for inflation in all unit costs used in the cost estimate (10 CFR Part 40, Appendix A, Criterion 9(f)(1); Appendix C of NUREG-1569, Standard Review Plan for In Situ Leach Uranium Extraction License Applications (NUREG-1569)).

Basis for Request

Criterion 9 of 10 CFR Part 40, Appendix A states that each cost estimate should be adjusted to identify any increases or decreases that are a result of inflation. Furthermore, Appendix C of NUREG-1569 states that the adjustment should be made by using the U.S. Department of Labor's change in the Consumer Price Index.

The Decommissioning Cost Estimate (DCE) does not provide revised unit costs to account for inflation for all of its unit costs in the cost estimate. The following unit costs items do not appear to account for inflation:

- Electrical
 - Power Costs (*Basis: Powder River Energy 2012*)
- Transportation and Disposal
 - Solid waste landfill disposal costs (*Basis: Casper City Landfill*)
 - 11e2 Disposal Costs (*Basis: Shirley Basin 2010*)
 - On-site Disposal (*Basis: Wyoming Department of Environmental Quality (WDEQ) Guideline 12 – 2013*)
- Vehicle Operation
 - Pickup (4x4 Diesel) (*Basis: WDEQ Guideline 12 – 2013*)
- Plant Dismantling
 - Concrete Floor Demolition (*Basis: WDEQ Guideline 12 – 2013*)
 - Cost of Demolition Per Ft³ (*Basis: WDEQ Guideline 12 – 2013*)
- Equipment
 - Loader (Cat 980H) (*Basis: WDEQ Guideline 12 – 2013*)

ENCLOSURE

RAI #1

Provide revised unit costs in the DCE to account for changes to inflation where the unit costs were based on activities performed multiple years ago and where Wyoming Department of Environmental Quality, Land Quality Division (WDEQ) Guideline 12's 2013 revision was used.

RAI (2)

Description of Deficiency

As currently presented, the surety estimate does not list cost elements that are appropriately categorized as being part of the contingency factor (10 CFR Part 40, Appendix A, Criterion 9(b)(1)(ii); Appendix C of NUREG-1569).

Basis for Request

10 CFR Part 40, Appendix A, Criterion 9(b)(1)(ii) requires that cost estimates include an adequate contingency factor. Appendix C of NUREG-1569 states that "the licensee should include a contingency amount to the total cost estimate for the final site closure. The staff considers a 15-percent contingency to be an acceptable minimum amount."

The Total Restoration and Reclamation Cost Estimates table includes a line item for "CONTINGENCY (Miscellaneous & Unknown) (25%)" and identifies the following cost elements as included in the 25 percent contingency factor:

- Project Design
- Contractor Profit and Mobilization
- Pre-Construction Investigation
- Project Management
- On-Site Monitoring
- Long-term Administration
- Site Security & Liability Assurance

The listed cost elements are not appropriately categorized as being part of the contingency factor because all of the listed cost elements represent anticipated costs for specific decommissioning cost elements. In contrast, contingency costs are *unforeseen* costs that are incorporated into the cost estimate through a contingency factor that helps to ensure coverage for unexpected circumstances that could raise decommissioning costs. Unless costs for each of the listed cost elements and a contingency of at least 15 percent are fully included, the cost estimate does not account for the full cost of decommissioning.

Formulation of RAI

Revise the surety estimate to separately account for the contingency factor after each of these cost elements are calculated.

RAI (3)

Description of Deficiency

As currently presented, the surety estimate does not appear to account for all estimated costs for engineering design, project design and long-term regulatory agency reporting costs; (10 CFR Part 40, Appendix A, Criterion 9(b)(1)(ii); Appendix C of NUREG-1569).

Basis for Request

Appendix C (IV) of NUREG-1569 calls for itemized, estimated costs for engineering design, review, and change; mobilization; quality control; and radiological safety; and any other costs not included in other estimation categories. The Willow Creek cost estimate does not appear to include several of these itemized costs and, therefore, may not account for the full cost of decommissioning.

For example, for a third party to follow the requirements of the license and to complete decommissioning and reclamation activities, there would be professional, engineering and/or reporting costs as required in the license for items such as:

- Semi-annual effluent and environmental monitoring program reporting. License Condition (LC) 12.1 states, "Effluent and environmental monitoring program results provided in the semi-annual report and in accordance with 10 CFR 40.65, "Effluent monitoring reporting requirements," shall be reported in the format shown in Table 3 of Regulatory Guide 4.14, (Rev. 1) entitled, "Sample Format for Reporting Monitoring Data."
- Annual Reporting. LC 12.3 states, "An annual report will be submitted to the NRC in accordance with LC 9.2, that includes the ALARA audit report, land use survey, monitoring data, and the SERP information required under LC 9.4(d). The report shall include a summary of the daily walk-through inspections."
- Final Decommissioning Completion Reporting. LC 9.3 states, "The land and structures will be decommissioned according to the Decommissioning Plan submitted December 19, 2000 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML003781238), as revised by submittals dated June 15, 2001 (ADAMS Accession No. ML011700655), June 18, 2001 (ADAMS Accession No. ML011710035), and August 31, 2001 (ADAMS Accession No. ML012490112) and in accordance with 10 CFR 40.42." Furthermore, Section 12.0 of the approved Decommissioning Plan titled Final Decommissioning Completion Report states, "Within six months of the conclusion of decommissioning and surface reclamation, a report containing all applicable documentation will be submitted to the NRC and the Wyoming Department of Environmental Quality."
- Ground water restoration monitoring reporting. LC 10.15 states, "The licensee shall conduct ground water restoration and post-restoration monitoring as described in Section 6.1 of the approved license application." Section 6.1.3.3 of the License Renewal Application titled Determination of Restoration Success states, "After the restoration in

an area has been achieved, and the post-restoration stabilization monitoring program is completed, a report will be completed summarizing the results of the restoration program. The restoration results will be compared with the restoration target values (discussed in Section 6.1.1 above). The report will also provide the results of the stability monitoring program. The report will be submitted to the regulatory agencies for their review and approval. The acceptance of the well-field restoration and stability success will be based on the ability to meet the goals of the restoration program and the lack of significant increasing trends during the stability monitoring period.”

- Alternate Concentration Limits (ACL) application. LC 10.15 states, “In submitting any license amendment application requesting review of proposed ACL pursuant to 10 CFR 40, Appendix A, Criterion 5(B)(6), the licensee must also show that it has first made practicable efforts to restore the specified hazardous constituents to the background or maximum contaminant levels (whichever is greater).”

The reporting costs do not appear to not fall under any of the subheadings listed under the heading “Miscellaneous Costs Associated with Third Party Contractors.” Additionally, it is unknown if the \$200,000 Project Design cost would be adequate for development of a Final Decommissioning Report, Ground Water Restoration Report(s), ACL application, and other reports that may fall under the miscellaneous cost line labeled “Project Design.” Therefore, the NRC staff requests that the licensee revise or justify its surety estimate as necessary, to reflect engineering design; project design; and long-term regulatory agency reporting costs; and any other costs not included in other estimation categories.

The NRC staff notes that the financial assurance estimate may require reporting costs (semi-annual and annual) for at least four years after the end of operations. Figure 3.14 of the approved License Renewal Application shows that reclamation schedule and final surface reclamation occurring approximately four years after the end of operations.

RAI #3

Demonstrate or provide sufficient funding in the DCE to cover anticipated costs related to engineering design, project design, and long-term regulatory agency reporting costs.