



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

April 23, 2018

Mr. Scott Schierman, HSE Manager  
Uranium One USA, Inc.  
907 N. Poplar Street, Suite 260  
Casper, WY 82601-1310

**SUBJECT: URANIUM ONE, USA, INC., WILLOW CREEK PROJECT, CAMPBELL AND JOHNSON COUNTIES, WYOMING, U.S. NUCLEAR REGULATORY COMMISSION VERIFICATION OF THE AUGUST 2017 FINANCIAL ASSURANCE (SURETY) UPDATE**

Dear Mr. Schierman:

By letter dated August 18, 2017, Uranium One USA, Inc., (Uranium One) submitted its Willow Creek Project 2017 annual financial assurance (surety) update to the U.S. Nuclear Regulatory Commission (NRC) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17241A052). Uranium One estimated the cost to decommission and decontaminate the Willow Creek facilities by an independent party at \$21,702,586. This constitutes a decrease of \$4,737 below the August 18, 2016, surety estimate of \$21,707,323 (ADAMS Accession No. ML16235A466) and \$78,076 above the previously approved surety amount of \$21,624,510 in Materials License SUA-1341 (ADAMS Accession No. ML16173A146). Based on the information provided in the financial assurance update submittal, the NRC staff has determined that the surety estimate of \$21,702,586 is acceptable as documented in the NRC's verification (enclosed).

License Condition 9.5 of Materials License SUA-1341 will be revised to reflect the current updated surety amount during a future licensing action.

As a result of this verification, the staff has completed its work on Cost Activity Code (CAC) and Enterprise Project Identifier (EPID) for the 2016 surety update 000092/04008502/L-2017-DFA-0022 and the CAC/EPID for the 2017 surety update 000092/04008502/L-2017-LLA-0326. Therefore, these CAC/EPIDs will be closed.

If you have any questions, please contact Mr. Ron Linton, Project Manager, at 301-415-7777 or, by email at [ron.linton@nrc.gov](mailto:ron.linton@nrc.gov).

S. Schierman

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

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.: 040-09067  
License No.: SUA-1597  
Enclosure: NRC Surety Estimate Staff Verification

cc: Luke McMahan, PG. (WDEQ-LQD)  
Ryan Schierman (WDEQ-URP)

S. Schierman

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**SUBJECT: URANIUM ONE, USA, INC., WILLOW CREEK PROJECT, CAMPBELL AND JOHNSON COUNTIES, WYOMING, SOURCE MATERIALS LICENSE SUA-1341, ANNUAL FINANCIAL ASSURANCE (SURETY) ESTIMATE  
ADJUSTMENT DATE April 23, 2018**

Docket No.: 040-08502  
License No.: SUA-1341  
Enclosures:  
Technical Evaluation Report

cc: Luke McMahan, PG. (WDEQ-LQD)  
Ryan Schierman (WDEQ-URP)

**CLOSES CAC/EPIDs:** 000092/04008502/L-2017-DFA-0022  
000092/04008502/L-2017-LLA-0326

DISTRIBUTION:  
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**ADAMS Accession No.: ML18107A724**

OFC	URLB	SPB	URLB	DUWP
NAME	RLinton	RAugustus	BvonTill	RLinton
DATE	4/ 19/2018	4/ 19/2018	4/ 23 /2018	4/ 23 /2018

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**Technical Evaluation Report  
Staff Verification of 2017 Surety Estimate  
Uranium One USA, Inc.  
Source Material License SUA-1341**

DATE:

DOCKET: 040-08502

LICENSE NO.: SUA -1341

LICENSEE: Uranium One USA, Inc.

SITE: Willow Creek Project, Irigaray and Christensen Ranch Facilities

PROJECT MANAGER: Ron Linton

TECHNICAL REVIEWER: Reginald Augustus, Ron Linton

## **Background**

Under Materials License SUA-1341, License Condition 9.5, Uranium One USA, Inc. (Uranium One) is required to submit to the Nuclear Regulatory Commission (NRC) an annual financial assurance (surety) update to cover third-party costs for decommissioning and decontamination at the Willow Creek Project (Willow Creek), Irigaray and Christensen Ranch facilities in Wyoming.

By letter dated August 18, 2016, Uranium One submitted its Willow Creek 2016 annual surety update to the NRC (Uranium One, 2016). The NRC reviewed the 2016 surety update and determined that the previously issued standby trust exemption for Willow Creek had expired on December 31, 2016 (NRC, 2014). During this time, the staff was in the process of reviewing the State of Wyoming's special account provision to determine if the special account provision was equivalent to the requirement in 10 CFR Part 40, Appendix A, Criterion 9(i) that, if a trust is not used, a standby trust be set up to receive funds in the event the Commission or State regulatory agency exercises its right to collect the surety. Since the NRC special account provision decision was not completed until October 25, 2017 (NRC, 2017), the staff determined that the 2016 surety review would be addressed in the licensee's 2017 annual surety update. By letter dated August 18, 2017, Uranium One submitted its Willow Creek 2017 annual surety update (Uranium One, 2017) to NRC.

## **Staff Review and Analysis**

This report includes the results of the staff's review of its 2016 and 2017 annual surety updates (Uranium One, 2016 and 2017). The staff reviewed Uranium One's Willow Creek surety update in accordance with requirements in 10 CFR Part 40, Appendix A, Criterion 9, "Financial Criteria" and in License Condition 9.5 of Materials License SUA-1341. Additionally, the staff used NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications" (SRP) as guidance in determining elements to be included in a surety review. Specifically, the staff used the review procedures and acceptance criteria in Section 6.0, and

Enclosure

guidance in Appendix C of the SRP. The staff also used Wyoming Department of Environmental Quality (WDEQ) Land Quality Division Guideline 12 "Standardized Reclamation Performance Bond Format and Cost Calculation Methods" (Guideline 12) when applicable, to verify that reasonable unit costs were included in the surety calculations (WDEQ, 2017b).

### *Sufficiency of the Cost Estimate*

In the surety calculations, the licensee included costs for decommissioning and decontamination, reclamation of sites, structures, and equipment used in conjunction with facility operations.

Uranium One estimated the cost to decommission and decontaminate the Willow Creek facilities by an independent party at \$21,702,586. This constitutes a decrease of \$4,737 below the previous year's surety estimate of \$21,707,323. The most significant categories that contributed to the surety estimate change generally concern updating of the licensee's current operating costs or revisions to reflect current development plans. Uranium One continues to suspend future development plans at the Willow Creek Project due to the low market price of uranium. The cost estimate is based on costs of a third party contractor, does not take credit for any salvage value and includes a 15 percent Project Design miscellaneous cost factor and a 10 percent Project Management miscellaneous cost factor.

The NRC reviewed the updated cost estimate against requirements in LC 9.5 (NRC, 2016). The staff observes that the licensee's surety estimate and the associated cost breakdown was adequately summarized and calculated in accordance with Appendix C of NUREG-1569 (NRC, 2003). The staff spot-checked the calculations within the cost breakdowns and found the calculations to be correct. The staff observes that 10 CFR Part 40, Appendix A, Criterion 9 does not specify a specific contingency factor to be used in the surety calculations. Guidance in NUREG-1569 recommends a minimum 15 percent contingency as an acceptable criterion. The staff finds that the 15 percent Project Design miscellaneous cost factor and a 10 percent Project Management miscellaneous cost factor used by the licensee is consistent with that guidance.

The staff's review of the cost adjustments were found to be consistent with proposed changes in operations. The staff found that the licensee has included in the update all activities: (1) listed in the reclamation plan or in Section 6.0 of NUREG-1569; and (2) conducted during the period covered by the estimate. The staff found the licensee has based the assumptions for the financial surety analysis on site conditions, including experiences with generally accepted industry practices, research and development at the site, and previous operating experience.

Therefore, the staff finds that the licensee has established an acceptable financial assurance cost estimate based on the requirements in 10 CFR Part 40, Appendix A, Criterion 9.

### *Determination of Wyoming's Use of a Fiduciary Fund to Meet Standby Trust Requirement*

Wyoming law requires that a separate account be set up to receive forfeited decommissioning funds, but does not specifically require an standby trust account (STA) as required by 10 CFR Part 40, Appendix A, Criterion 9(i). Section 35-11-424(a) of the Code of Wyoming states, "[a]ll forfeitures collected under the provisions of this act shall be deposited with the State treasurer in a separate account for reclamation purposes." Pursuant to WDEQ financial assurance

requirements, WDEQ holds permit bonds in a fiduciary fund called an agency fund. If a bond is forfeited, the forfeited funds are moved to a special revenue account. Although the special revenue account is not an STA, the special revenue account serves a similar purpose in that forfeited funds are not deposited into the State treasury for general fund use, but instead are set aside in the special revenue account to be used exclusively for reclamation (decommissioning) purposes.

NRC elected to grant Uranium One an exemption from the STA requirements in 10 CFR Part 40, Appendix A, Criterion 9, for the surety arrangement until the 2016 review cycle to allow the staff an opportunity to evaluate whether the separate account required by the State of Wyoming would satisfy the NRC's requirement for a STA (NRC, 2014).

By letter dated May 26, 2017 (WDEQ, 2017a), the State of Wyoming (Wyoming) submitted to NRC its basis for how its Fiduciary Fund (Fund 487), was equivalent, and thereby meets the intent of 10 CFR Part 40, Appendix A, Criterion 9(i). The NRC reviewed Wyoming's letter and in an internal memo dated October 25, 2017, outlined its determination that Wyoming's Fund 487 was equivalent to an STA, and therefore meets the regulatory requirements of 10 CFR Part 40, Appendix A, Criterion 9(i) (NRC, 2017).

## **Conclusion**

In the information provided in the application and the detailed review conducted of the surety estimate for Uranium One's Willow Creek Project, the staff concludes that the 2017 surety estimate includes funds sufficient to cover the estimated current costs for closure of the facilities. The staff determined that the updated surety amount meets the requirements of 10 CFR Part 40, Appendix A, Criterion 9 and LC 9.5 (NRC, 2016) and is therefore acceptable.

For the reasons discussed above, the staff finds that Uranium One has provided adequate justification for the current financial assurance estimate at the Willow Creek Project. Therefore, the staff has reasonable assurance that the financial assurance estimate is sufficient and accepts Uranium One's estimate for the Willow Creek Project.

## **References**

10 CFR Part 40. Code of Federal Regulations, Title 10, Energy, Part 40, "Domestic Licensing of Source Material."

10 CFR Part 51. Code of Federal Regulations, Title 10, Energy, Part 51, "Environmental Protection Regulations for Domestic Licensing and related Regulatory Functions."

NRC, 2017. Internal memo from R. Augustus, US NRC, to J. Tappert, US NRC, Determination of Whether Wyoming's Department of Environmental Quality's Fiduciary Fund Complies With Nuclear Regulatory Commission Regulatory Requirements, October 25, 2017, ADAMS Accession No. ML17234A454.

NRC, 2016. Uranium One USA, Inc. Materials License SUA-1341, Amendment No. 5, September 29, 2016, ADAMS Accession No. ML16173A146.

NRC, 2014. *Federal Register* Notice, Temporary Exemption, Financial Assurance requirements, Uranium One USA, Inc., Willow Creek Project, SUA-1341, July 31, 2014, ADAMS Accession No. ML14212A256).

NRC, 2003. NUREG-1569, "Standard Review Plan for In Site Leach Uranium Extraction License Applications—Final Report." June 2003.

Uranium One, 2017. Annual Surety Update for SUA-1341 Willow Creek Operations, August 2017, Source Material License SUA-1341, August 18, 2017, ADAMS Accession No. ML17241A052.

Uranium One, 2016. Annual Surety Update for SUA-1341 Willow Creek Operations, August {2015] 2016, Source Material License SUA-1341, August 18, 2016, ADAMS Accession No. ML16235A466.

WDEQ, 2017a. Letter from T. Parfitt, WDEQ to D. Collins, US NRC, May 26, 2017, ADAMS Accession No. ML17177A267.

WDEQ, 2017b. Wyoming Department of Environmental Quality Land Quality Division, Guideline Standardized Reclamation Performance Bond Format and Cost Calculation Methods, Accessed January 31, 2017,  
[http://deq.wyoming.gov/media/attachments/Land%20Quality/Guidelines/Guideline\\_12\\_Bond\\_Calculations\\_\(2\\_2017\).pdf](http://deq.wyoming.gov/media/attachments/Land%20Quality/Guidelines/Guideline_12_Bond_Calculations_(2_2017).pdf).