

August 20, 2015

Mr. Scott Schierman, Manager
Health, Safety, and Environment
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, SOURCE MATERIALS LICENSE SUA-
1341, ANNUAL FINANCIAL ASSURANCE (SURETY) ESTIMATE
ADJUSTMENT (TAC NO. J00743)

Dear Mr. Schierman:

By letter dated September 18, 2014, Uranium One, USA, Inc. submitted its Annual Report entitled, "Willow Creek Project, 2013-2014 Annual Report for WYDEQ Permit to Mine No. 478". The report contains the annual financial assurance update as required by Materials License SUA-1341, License Condition 9.5. The report was made publicly available on October 29, 2014, and was placed in the Nuclear Regulatory Commission (NRC) Agencywide Documents Access and Management System (ADAMS). The report can be found at ADAMS Accession No. ML14287A473. NRC staff acknowledged receipt of the surety update on November 4, 2014 (ADAMS Accession No. ML14321A333).

The financial assurance update seeks to increase the financial assurance amount for the Willow Creek Project to a total of \$21,672,638 from the currently approved amount of \$20,363,482. This increase is primarily due to increase in the Miscellaneous Cost Associated with Third Party Contractors and Contingency Costs from an aggregate of 20% to 25%.

The NRC staff has reviewed the financial assurance update in accordance with License Condition 9.5, consistent with Criterion 9 of Appendix A to Part 40 of Title 10 of the Code of Federal Regulations (10 CFR Part 40, Appendix A). Based on this review, staff has reasonable assurance that the current financial assurance estimate of \$21,672,638 will be adequate to complete groundwater restoration and decommissioning activities at the facility.

Uranium One's current financial assurance instrument is an irrevocable letter of credit held in favor of the State of Wyoming. However, Uranium One does not have a standby trust agreement (STA) in place at this time as required by 10 CFR Part 40, Appendix A, Criterion 9. The NRC staff is currently in the process of evaluating whether the State of Wyoming's separate account provision for financial assurance instruments is consistent with the NRC's STA requirement. Therefore, in accordance with 10 CFR 40.14(a), NRC has, upon its own initiative, elected to grant an exemption to the STA requirements in 10 CFR Part 40, Appendix A, Criterion 9, for the current financial assurance arrangements for the Willow Creek Project until the 2016 review cycle. This exemption was granted and published in the *Federal Register* on July 31, 2014 (ADAMS Accession No. ML14212A256). The exemption will expire on December 31, 2016.

Additionally, NRC staff is administratively amending License Condition 9.2 to reflect the recent NRC merger of the Office of Federal and State Materials and Environmental Management Programs into the Office of Nuclear Material Safety and Safeguards.

The NRC staff's review is documented in the enclosed Safety Evaluation Report (SER) (Enclosure 1). The SER concludes that sufficient information is available to support the reasonable assurance finding by the staff. License Amendment No. 4 is also enclosed (Enclosure 2).

This licensing action meets the categorical exclusion provisions in 10 CFR Part 51.22(c)(10)(i) and 10 CFR Part 51.22(c)(10)(ii). Therefore, no further environmental review is required for this action.

If you have any questions regarding this action, please contact Mr. Ron Linton, the Project Manager for License SUA-1341, at 301-415-7777, or by e-mail at ron.linton@nrc.gov.

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>.

Sincerely,

/RA/

Andrew Persinko, Deputy Director
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket No.: 040-08502
License No.: SUA-1341

Enclosures:

1. Safety Evaluation Report
2. Amendment No. 4 to License SUA-1341

cc: Luke McMahan, PG. (WDEQ)

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ML15202A122 (Pkge.); ML15202A179 (Ltr.); ML15202A155 (Lic. Amend.)

OFC	URLB	URLB	SPB	URLB	OGC	DUWP
NAME	R. Linton	S. Achten	R. Augustus	B. VonTill	M. Spencer	D. Persinko
DATE	7/23/15	7/23/15	8/13/15	8/19/15	8/17/15	8/20/15

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**SAFETY EVALUATION REPORT
2014-2015 FINANCIAL ASSURANCE UPDATE FOR THE WILLOW CREEK PROJECT,
JOHNSON AND CAMPBELL COUNTIES, WYOMING**

DATE: August 20, 2015

DOCKET: 04008502

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

SUBJECT: Willow Creek Project Annual Financial Assurance (Surety) Update

BACKGROUND

By License Condition 9.5, Uranium One USA, Inc. (Uranium One) is required to submit to the U.S. Nuclear Regulatory Commission (NRC), for review and approval, annual updates of the financial surety to cover third-party costs for decommissioning and decontamination at the Willow Creek Project, Irigaray and Christensen (CR) Ranch facilities in Wyoming. On September 18, 2014, Uranium One submitted to the NRC, for review and approval, its Willow Creek Project, Irigaray and Christensen Ranch Annual Report (August 19, 2013 – August 18, 2014) that contained its annual surety estimate. The report was made publicly available in the NRC's Agencywide Documents Access and Management System (ADAMS) and can be found at ADAMS Accession No. ML14278A473. Staff from the NRC Uranium Recovery and Licensing Branch and the Performance Assessment Branch in the Office of Nuclear Materials Safety and Safeguards reviewed the annual financial assurance (surety) update. Specifically, staff reviewed the sufficiency of the cost estimate and appropriateness of the instrument used to maintain the financial assurance estimate (surety). NRC staff sent a request for additional information (RAI) to Uranium One on January 20, 2015 (ADAMS Accession No. ML14363A507). Uranium One responded to NRC RAI in a letter dated March 30, 2015 (ADAMS Accession No. ML15105A143). The surety update provided in the Annual Report and the response to NRC RAI is collectively referred to in this Safety Evaluation Report as Uranium One's financial assurance estimate. This Safety Evaluation Report documents the results of NRC staff's review of the annual financial assurance estimate.

REGULATORY REQUIREMENTS

The NRC staff reviewed Uranium One's Willow Creek Project 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. The NRC staff used NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications" (SRP) (ADAMS

Accession No. ML032250177) as guidance in determining elements to be included in a surety review. Specifically, staff used the review procedures and acceptance criteria in Section 6.5, and guidance in Appendix C of the SRP. Staff also used NRC's Technical Position on Financial Assurances for Reclamation, Decommissioning, and Long-Term Surveillance and Control of Uranium Recovery Facilities, October 1988 (ADAMS Accession No. ML020300533) in the review. The NRC staff 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.

DISCUSSION

Sufficiency of the Cost Estimate

In the surety calculations, the licensee includes costs for decommissioning and decontamination, reclamation of sites, structures, and equipment used in conjunction with facilities operation. The staff finds that the licensee used either guidance consistent with WDEQ Guideline 12 (when applicable) or actual costs in the development of the cost estimate.

In their financial assurance estimate, Uranium One determined the cost to decommission and decontaminate the Willow Creek Project facilities by an independent party at \$21,056,535 for the WDEQ portion and \$21,672,638 for the NRC portion. This constitutes increases in the cost estimates for WDEQ and NRC of \$567,638 and \$1,309,156, respectively, from the current cost estimate covered by the current Irrevocable Letter of Credit (LOC) issued in favor of WDEQ of \$21,075,000.

Uranium One has suspended future development at the Willow Creek Project due to the low market price of uranium. The changes to the cost estimate are generally due to the licensee's change in miscellaneous cost associated with third party contractors and contingency cost calculation. The cost estimate includes the following items:

- Worksheet 1: Groundwater Restoration
 - The wellfield area and number of wells for Mine Unit (MU) 10 and MU 11 has been adjusted by Uranium One to reflect actual conditions. Wells for MU 10-7 and MU 10-8 have been removed as the licensee stated future development has been suspended due to the low price of uranium.
 - The required WDEQ-WQD 3% annual adjustment for the plugging and abandonment of deep disposal wells CR DW-1 and CR 18-3 has been adjusted.
 - Credit for completion of groundwater sweep for CR MUs 2-6 has been granted by the WDEQ, however credit has not been granted by NRC; therefore, separate WDEQ estimates and NRC estimates are provided.
- Worksheet 2: Plant Equipment Removal and Disposal
 - During the 2013-2014 reporting period Uranium One removed module building for MU 10-7 and MU 10-8 in MU 10.
 - Costs were adjusted by Uranium One to reflect the October 2013 Guideline 12 update.

- Worksheet 3: Building Demolition and Disposal
 - During the 2013-2014 reporting period Uranium One removed module building 10-7 and 10-8.
 - Costs were adjusted to reflect the October 2013 Guideline 12 update.
- Worksheet 4: Pond Reclamation Cost
 - Costs remained the same as 2012-2013 cost estimates.
- Worksheet 5: Well Plugging and Abandonment
 - The total number of wells for CR MU 10 has been decreased to reflect the actual number of wells installed. Wells for and the possible development of Modules 10-7 and 10-8 were removed.
 - The estimated number of wells to be installed in MU 1 has been adjusted.
- Worksheet 6: Wellfield Equipment Removal and Disposal
 - Section I: Wellfield Piping
 - The number of wells and amount of piping in CR MU 10 and MU 11 has been revised to reflect actual projected numbers.
 - Section II: Production Well Pumps
 - The number of production well pumps has been revised to reflect the current number for CR MU 10, and the projected number for MU 11 has been revised.
 - Section V: Manholes
 - Same as 2012-2013 assumptions, no changes made.
- Worksheet 7: Topsoil Replacement and Revegetation
 - Same as 2012-2013 assumptions, no changes made.
- Worksheet 8: Miscellaneous Reclamation
 - Same as 2013 -1013 assumptions, no changes made.
- Summary of Reclamation/Restoration Surety Estimate
 - The licensee has reported a 15% cost under “Project Design” and a 10% cost for “Project Management” under the “Miscellaneous Cost Associated with Third Party Contractors”, which added up to a 25% increase in the financial assurance amount. Previously, costs under the “Miscellaneous Cost Associated with Third Party Contractors” reported by the licensee added up to 5%.
 - The licensee removed the 15% cost previously listed under “Contingency”.
 - The net effect of this change is a 5% increase in “Miscellaneous Cost Associated with Third Party Contractors” and “Contingency” costs, when combined. Uranium One has argued in their financial assurance estimate that the combined “Miscellaneous Cost Associated with Third Party Contractors” and “Contingency” cost satisfies the 25% contingency factor and is consistent with NRC's, “Technical Position on Financial Assurances for Reclamation, Decommissioning,

and Long-Term Surveillance and Control of Uranium Recovery Facilities”, October 1988.

The NRC staff identified four issues with the surety cost estimate that were submitted to Uranium One as RAIs on January 20, 2015 (ADAMS Accession No. ML14363A507). All of the issues identified were adequately addressed by the licensee with one exception. At issue is whether the cost estimate includes sufficient funds to cover the generation of reports that the licensee is required to submit to NRC. Uranium One contends in its responses to NRC RAI that the contract administration contingency of 10 percent and engineering contingency of 15 percent adequately covers the cost of professional, engineering, and/or reporting costs. The NRC staff contends that certain reporting costs are not unforeseen and unknown to Uranium One and should be included in the financial assurance estimate. The NRC staff intends to revisit this issue with the licensee in the next surety cycle in August 2015. However, since the next financial assurance update is due in August 2015, and the current estimate includes a \$1,309,156 increase to the current financial assurance estimate, NRC staff has determined it is desirable to accept the proposed amount of \$21,672,638 for the current financial assurance cycle so that the Irrevocable Letter of Credit (LOC) issued in favor of WDEQ can be increased without delay.

The NRC staff has completed its review of the surety update estimate for Uranium One’s Willow Creek Project, Irigaray and Christensen Ranch facilities, and finds that the licensee has included in the update, all activities listed in the reclamation plan or in Sections 6.1-6.4 of the standard review plan in NUREG-1569, that are to be conducted during the period covered by the update. The NRC staff finds the licensee has based the assumptions for the financial surety analysis on site conditions, including experiences with generally accepted industry practices, and research and development at the site.

The NRC staff finds the values used in the financial surety update are based on current dollars and reasonable costs for the required reclamation activities are defined. Therefore, the NRC 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, with the exception as stated above

Appropriateness of the Financial Instrument

Currently the licensee uses an irrevocable letter of credit to satisfy its financial assurance requirements. Pursuant to Criterion 9(d), the NRC,

[M]ay accept financial sureties that have been consolidated with financial or surety arrangements established to meet requirements for other Federal or state agencies and/or local governing bodies for decommissioning, decontamination, reclamation, and long-term site surveillance and control, provided such arrangements are considered adequate to satisfy these requirements and that the portion of the surety which covers the decommissioning and reclamation of the mill, mill tailings site and associated areas, and the long-term funding charge is clearly identified and committed for use in accomplishing these activities.

In accordance with this criterion, Uranium One has consolidated the NRC's financial surety with the financial surety required by the State of Wyoming. As the financial instrument is in favor of WDEQ the original copy of the financial instrument remains with WDEQ based on an agreement between the State and the NRC. The NRC maintains a copy of the instrument on file as well. Uranium One will continue to use an irrevocable LOC to satisfy its financial assurance obligations in the amount provided for in this update. The NRC will obtain a copy of the instrument from WDEQ once the LOC has been updated to reflect the new higher amount. Once the cost estimate is approved, the LOC will be issued in favor of WDEQ for an amount equal to or greater than NRC's portion of \$21,672,638.

As of December 17, 2012, NRC uranium recovery licensees that do not use a trust fund to satisfy their financial assurance obligations are required to have a standby trust agreement (STA) in place, pursuant to 10 CFR Part 40, Appendix A, Criterion 9. At this time, Uranium One does not have an STA in place, nor has it requested an exemption from the requirement to do so. However, the NRC has the discretion under 10 CFR 40.14(a), to grant an exemption from the requirements of a regulation in 10 CFR Part 40 on its own initiative, if it determines the exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest.

Wyoming law requires that a separate account be set up to receive forfeited decommissioning funds, but does not specifically require a STA. NRC has elected to grant Uranium One an exemption from the STA requirements in 10 CFR Part 40, Appendix A, Criterion 9, for the current surety arrangement until the 2016 review cycle to allow the NRC staff an opportunity to evaluate whether the separate account required by the State of Wyoming would satisfy the NRC's requirement for a standby trust agreement. This exemption was granted and published in the *Federal Register* on July 31, 2014 (ADAMS Accession No. ML14212A256). This exemption will expire on December 31, 2016, for the Willow Creek Project. At that time, Uranium One will be required to ensure that its financial assurance arrangement includes an STA to receive decommissioning funds, even if this results in Uranium One having to obtain a separate financial surety for the NRC.

ENVIRONMENTAL REVIEW

A license amendment to reflect an update in the amount of financial assurance or corrective revisions belongs to a category of actions which the NRC has determined do not individually or cumulatively have a significant effect on the environment. Such actions qualify for a categorical exclusion under 10 CFR 51.22(c) and do not require an environmental assessment.

Specifically, the NRC staff has determined that the financial assurance update is categorically excluded from further environmental review under 10 CFR 51.22(c)(10)(i). The administrative change to the license to reflect a new mailing address is categorically excluded from further environmental review under 10 CFR 51.22(c)(10)(ii). Likewise, the NRC staff has determined that the exemption from the requirement to have an STA in place is eligible for categorical exclusion under 10 CFR 51.22(c)(25)(vi)(H), which provides that an exemption from surety, insurance, or indemnification requirements is categorically excluded if the exemption would not result in any significant hazards consideration; change or increase in the amount of any offsite effluents; increase in individual or cumulative public or occupational radiation exposure; construction impacts; or increase in the potential for or consequence from radiological accidents. The staff finds that the STA exemption involves surety, insurance and/or indemnity

requirements and that granting Uranium One this temporary exemption from the requirement of establishing a STA would not result in any significant hazards or increases in offsite effluents, radiation exposure, construction impacts, or potential radiological accidents. Therefore, an environmental assessment is not required.

The NRC staff has determined that Section 7 consultation is not required because the proposed action is administrative/procedural in nature and will not affect listed species or critical habitat. The NRC staff has also determined that the proposed action is not a type of activity that has potential to cause effects on historic properties because it is administrative/procedural action. Therefore, no further consultation is required under Section 106 of the National Historic Preservation Act.

PROPOSED LICENSE CONDITION

Uranium One submitted its annual surety update (ADAMS Accession No. ML15105A143) that estimated the NRC surety amount at \$21,672,638. The NRC staff agrees with Uranium One's updated NRC surety estimate of \$21,672,638 and directs that the financial assurance (surety) for Materials License SUA-1341 be set at an amount no less than \$21,672,638.

The last paragraph of NRC Materials License SUA-1341, License Condition 9.5 will be changed to read:

- 9.5 The licensee's currently approved surety, Irrevocable Standby Letter of Credit issued in favor of the State of Wyoming, Department of Environmental Quality (WDEQ) shall be continuously maintained in an amount no less than \$21,672,638 for the purpose of complying with 10 CFR 40, Appendix A, Criterion 9, until a replacement is authorized by both the State of Wyoming and the NRC.

Additionally, NRC staff is administratively amending License Condition 9.2 to reflect the recent NRC merger of the Office of Federal and State Materials and Environmental Management Programs into the Office of Nuclear Material Safety and Safeguards.

The first paragraph of NRC Materials License SUA-1341, License Condition 9.2 will be changed to read:

- 9.2 All written notices and reports to the Nuclear Regulatory Commission (NRC) required under this license, shall be sent to the following address: ATTN: Document Control Desk, Director, Office of Nuclear Material Safety and Safeguards, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001. An additional copy shall be submitted to: Deputy Director, Division of Decommissioning, Uranium Recovery, and Waste Programs, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Mailstop T8 F5, 11545 Rockville Pike, Two White Flint North, Rockville, MD 20852-2738.

CONCLUSION

Based on the information provided in the application and the detailed review conducted of the surety estimate for Uranium One's Willow Creek Project, the NRC staff concludes that the current surety estimate includes funds sufficient to cover the estimated current costs for closure of the facilities, except as noted above, and the financial instrument is acceptable. The surety arrangement does not include an STA agreement required in 10 CFR Part 40, Appendix A, Criterion 9. However, NRC granted a temporary exemption to the regulation that requires an STA for this surety arrangement.

For the reasons identified above, the NRC staff determined that Uranium One has provided adequate justification for the current financial assurance estimate at Willow Creek Project. Therefore, the NRC staff has reasonable assurance that the financial assurance estimate is sufficient for this financial assurance cycle and accepts Uranium One's estimate for the Willow Creek Project. The revised license conditions are shown in this Safety Evaluation Report.