



Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Matthew H. Mead, Governor

Todd Parfitt, Director

December 15, 2017

Mr. Scott Schierman
Uranium One USA, Inc.
907 North Poplar Street, Suite 260
Casper, WY 82601

RE: 2016-2017 Annual Report Review, PT478, Uranium One, Willow Creek ISR Project

Dear Mr. Schierman,

The Wyoming Department of Environmental Quality/Land Quality Division (LQD) has reviewed the 2016-2017 Annual Report for Uranium One's Willow Creek ISR Project, Permit No. 478. The enclosed memorandum provides LQD's review comments which request revised materials in order to complete the review. Please see the enclosed review memorandum and submit appropriate responses. Once adequate responses are received, this Annual Report may be closed out.

If you have any questions, please contact me at 307-675-5619.

Sincerely,

Luke McMahan P.G.
Project Geologist
WDEQ-LQD District III

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Attachment: 2016-2017 Annual Report Review Memorandum

xc: Cheyenne LQD Files (with attach.)

Mr. Ron Linton, U.S. NRC, MS T-8F5, 11545 Rockville Pike, Rockville, MD 20852



Handwritten note: 12/15/17



WYOMING

ANNUAL REPORT REVIEW MEMORANDUM

TO: File: PT478; Uranium One, Willow Creek ISR Project, Annual Reports

FROM: Luke McMahan, Project Geologist, District III *LM*

DATE: December 15, 2017

SUBJECT: 2016-2017 Annual Report Review, PT478, Uranium One, Willow Creek ISR Project

DISCUSSION

This memorandum presents my review comments for the Uranium One, Willow Creek ISR Project 2016-2017 Annual Report. The following comments have been provided to Uranium One under cover letter dated December 15, 2017 and request Uranium One to provide clarification and/or additional information in order to complete the review of the subject Annual Report. The Report was received by LQD on August 18, 2017 under cover letter dated August 17, 2017 from Mr. Scott Schierman of Uranium One. The Report covers the activities at Willow Creek's Irigaray and Christensen Ranch Projects from the period of July 1, 2016 to June 30, 2017.

There has been no new disturbance (no new roads, utilities, wells, drill holes, ponds, buildings, topsoil stripping, etc.) since the last annual reporting period. The Surety Estimate provided with the 2016-2017 Annual Report (NRC Estimate = \$21,702,586) proposes a decrease of \$4,737 from the current bond amount of \$21,707,323 set forth in the LQD Director's Bond Letter dated April 3, 2017.

REVIEW COMMENTS

1. Uranium One has provided an electronic copy of the 2016-2017 Annual Report with the initial submittal. Please update the electronic copy of the Annual Report to reflect the revisions and/or additional information resulting from the comments listed below.
2. Christensen Project Area Facilities Location Map: Please update the permit boundary in the area of Mine Unit 10. The boundary needs to be extended into Section 36 to reflect the Mine Unit 10 Incidental Boundary Revision.

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3. Christensen Ranch Interim Reclamation Map and Drill Hole Reporting: Delineation drill holes in the proposed Mine Units 11 & 12 are designated in the map legend as "*location of delineation drill holes to be reclaimed during the fall of 2016.*" Reclamation of drill holes requires the appropriate reporting to LQD in order to demonstrate that these holes have been properly plugged and abandoned. LQD did not find these drill holes listed in Table 5 (Abandoned Drill Site Report) provided in Appendix 1 of the Annual Report. Have these holes been reclaimed? Please clarify the reclamation status of these delineation drill holes and update the subject map accordingly. Additionally, update Section IV (Drill Hole Reporting) of the Annual Report text to reflect the status of the drill holes in proposed Mine Units 11 and 12.
4. Irigaray & Christensen Ranch Environmental Monitoring Stations Locations Map: Please update the map to reflect the following:
 - a) Update the permit boundary in the area of Mine Unit 10. The boundary needs to be extended into Section 36 to reflect the Mine Unit 10 Incidental Boundary Revision.
 - b) Update the hatch pattern for Mine Unit 9 to indicate future wellfield area versus existing wellfield area per the map legend.
5. Section III.C, Topsoil Stockpile Table, Pages 10 & 11; Please update the subject topsoil stockpile table to reflect the following:
 - a) TS#4 is listed on the table, however Uranium One's responses to LQD's comments from review of the previous annual report (2015-2016) indicate that this stockpile no longer exists and was used for reclamation at the former 5I7 R&D site. Please verify and revise the table so that it indicates that this stockpile has been used and where it was used.
 - b) Update the topsoil stockpile table in the Report with Topsoil Stockpiles #8A, #35 and #36 that are shown on the Christensen Project Area Facilities Location Map. Additionally, three (3) topsoil stockpiles were identified during the annual inspection at the Christensen Ranch Site (November 29, 2017) that are not listed on the table in the Annual Report or shown on the Christensen Project Area Facilities Location Map in the Annual Report. Please add these topsoil stockpiles to the topsoil stockpile table and the Christensen Project Area Facilities Location Map. The stockpiles were found to be located during the annual inspection at the following latitude/longitude coordinates;
 - 43.785218, -106.028453
 - 43.802264, -106.031164
 - 43.807297, -106.034825

6. Appendix 6, Recurring Costs; Page 1; under Transportation and Disposal, a rate of \$47.00/ton for "*Casper City Landfill rates for outside of Natrona County commercial trailer over 8 feet in length*" is listed. LQD's research finds that current Casper City Landfill rates for this type of load is set at \$61.10 per ton. Please update this unit rate to agree with current rates for this type of load at the Casper City Landfill.
7. Appendix 6, Worksheet 1, Section VI, Restoration Capital Requirements; this section provides the reclamation costs for the two Class 1 Deep Disposal Wells at Willow Creek Mine. In reviewing the DEQ-Water Quality Division Class 1 Injection Well Permit for these wells (#10-219), it appears that the reclamation costs under this section are mismatched with the corresponding well. In accordance with the disposal well permit, CR DW-1 should be listed with an initial reclamation cost estimate of \$66,250 and CR 18-3 should be listed as \$73,950. Please revise accordingly.
8. Appendix 6, Worksheet 1, Section VI, Restoration Capital Requirements; the Plug & Abandonment costs for the two Deep Disposal Wells require an increase in accordance with the DEQ-Water Quality Division Class 1 Injection Well Permit No. 10-219. As a result, the total reclamation cost for the two disposal wells should be set at \$162,532. Please increase the reclamation cost for these wells in accordance with the following:
 - a) CR 18-3: the 2012 WQD Class 1 Injection Well Permit Renewal indicates a bond amount of \$73,950. Adding 3% annually, per the WQD permit, through 2018 results in a reclamation amount of \$85,729.
 - b) CR DW No.1: the 2012 WQD Class 1 Injection Well Permit Renewal indicates a bond amount of \$66,250. Adding 3% annually, per the WQD permit, through 2018 results in a reclamation cost of \$76,803.

SUMMARY

In accordance with the comments listed above, revised materials are required in order to complete the review of the 2016-2017 Annual Report.

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