

June 22, 2010

Mr. Jon Winter
Manager, Wyoming Environmental
and Regulatory Affairs
Uranium One Americas, Inc.
907 N. Poplar Street
Suite 260
Casper, WY 82601

SUBJECT: DRAFT SOURCE MATERIAL LICENSE, URANIUM ONE AMERICAS, INC.,
MOORE RANCH URANIUM PROJECT IN SITU RECOVERY FACILITY,
CAMPBELL COUNTY, WYOMING (TAC J00546)

Dear Mr. Winter:

On January 18, 2010, Uranium One Americas, Inc. (Uranium One) provided the third and final set of responses to open issues identified by U.S. Nuclear Regulatory Commission (NRC) staff during the review of the Moore Ranch Uranium Project application for a new source material license. NRC staff has reviewed the open issue responses and has incorporated them into its Safety Evaluation Report (SER). In some cases, Uranium One's responses did not sufficiently address the respective open issues. In these cases, the NRC staff developed proposed license conditions. The NRC staff is in the process of finalizing the SER and has developed the enclosed draft license for your review and comment.

Note that License Condition 10.10 addresses NRC review and approval of hydrologic test packages at the Moore Ranch facility. During the technical review, NRC staff observed that the hydrogeologic conditions at Well Field 2 were more complex than the conditions at Well Field 1. Therefore, the staff has proposed a license condition whereby the hydrologic test package for Well Field 1 would be submitted to the NRC, while the hydrologic test package for Well Field 2 would be submitted to the NRC for review and approval. The hydrologic test package for Well Field 1 should include at a minimum the following information:

- The location, depth, screen interval, targeted aquifer, and completion report for all injection, production, and monitoring wells in Well Field 1.
- Pumping tests in the 70 sand to demonstrate the connection across the 70 sand aquifer and with the monitoring well ring. The package should include all data, analysis, and results for these pumping tests.
- The baseline ground water quality measurements for all wells in the 68, 70, and 72 sand aquifers.
- The UCLs for all monitoring wells in the 68, 70, and 72 sand aquifers in Well Field 1.
- The RTVs for the 70 sand aquifer in Well Field 1.

For Well Field 2, the hydrologic test data package would be submitted for NRC review and approval. The hydrologic test package for Well Field 2 should include at a minimum the following information:

- The location, depth, screen interval, targeted aquifer, and completion report for all injection, production, and monitoring wells in Well Field 2.
- A long term pumping test (greater than 3 days) in the 70 sand aquifer in the region where it coalesces with the 68 sand. Observation wells must be appropriately located in both the 70 sand, 68 sand, and 60 sand aquifers for this test. The package should include all data, analysis, and results for these pumping tests.
- Pumping tests in the 70 sand to demonstrate the connection across the 70 sand aquifer and with the monitoring well ring. The package should include all data, analysis, and results for these pumping tests.
- The baseline ground water quality measurements for all wells in the 60, 68, 70, and 72 sand aquifers.
- The UCLs for all monitoring wells in the 60, 68, 70, and 72 sand aquifers in Well Field 2.
- The RTVs for the 70 sand aquifer and the 68 sand aquifer in Well Field 2.

Note that this draft license does not constitute a final licensing decision by the NRC staff. Please review the draft license and provide comments within seven days of receipt of this letter. Comments can be provided via letter or email. If Uranium One would prefer, NRC staff can schedule a public meeting to discuss the draft license. Significant changes or deviations from the draft license may require additional staff review.

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 document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning the above, please contact me at (301) 415-0724 or via email at Douglas.Mandeville@nrc.gov.

Sincerely,

/RA/

Douglas T. Mandeville, Project Manager
Uranium Recovery Licensing 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. 40-9073

Enclosure: Draft Source Material License

cc: G. Mooney, WDEQ

- The location, depth, screen interval, targeted aquifer, and completion report for all injection, production, and monitoring wells in Well Field 2.
- A long term pumping test (greater than 3 days) in the 70 sand aquifer in the region where it coalesces with the 68 sand. Observation wells must be appropriately located in both the 70 sand, 68 sand, and 60 sand aquifers for this test. The package should include all data, analysis, and results for these pumping tests.
- Pumping tests in the 70 sand to demonstrate the connection across the 70 sand aquifer and with the monitoring well ring. The package should include all data, analysis, and results for these pumping tests.
- The baseline ground water quality measurements for all wells in the 60, 68, 70, and 72 sand aquifers.
- The UCLs for all monitoring wells in the 60, 68, 70, and 72 sand aquifers in Well Field 2.
- The RTVs for the 70 sand aquifer and the 68 sand aquifer in Well Field 2.

Note that this draft license does not constitute a final licensing decision by the NRC staff. Please review the draft license and provide comments within seven days of receipt of this letter. Comments can be provided via letter or email. If Uranium One would prefer, NRC staff can schedule a public meeting to discuss the draft license. Significant changes or deviations from the draft license may require additional staff review.

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 document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning the above, please contact me at (301) 415-0724 or via email at Douglas.Mandeville@nrc.gov.

Sincerely,

/RA/

Douglas T. Mandeville, Project Manager
 Uranium Recovery Licensing 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. 40-9073
 Enclosure: Draft Source Material License
 cc: G. Mooney, WDEQ

Distribution:

E Striz JWebb DGillen D Orlando B Shroff

ML100970139

| | | | | | | | | |
|--------|-------------|----------|----------|----------|-----------------------|--------------------------|-----------------------|-------------|
| Office | DWMEP | DWMEP | DWMEP | DWMEP | RIV | OGC | DWMEP | DWMEP |
| Name | DMandeville | BGarrett | SCohen | BvonTill | JWhitten Via email | JHull NLO w/ edits | BVT for KMcConnell | DMandeville |
| Date | 04/15 /10 | 04/15/10 | 04/26/10 | 05/04/10 | 05/12/10 | 06/21/1 0 | 06/22/10 | 06/22/10 |