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May 10, 2012 **via Overnight Mail**

Glenn Mooney-Senior Geologist
Wyoming Department of Environmental Quality
Land Quality Division – District III
2100 West 5th Street
Sheridan, WY 82801

RE: Permit to Mine No. 478
Christensen Ranch Project Mine Unit 5 – Non-Significant Revision
Revised Monitoring Plan for Mine Unit 5-2 Area

Dear Mr. Mooney:

Under cover dated February 7, 2012 Uranium One submitted a Non-Significant Revision (NSR) to the Mine Unit 5 Wellfield Data Package Submitted February, 1995 to provide a monitoring plan for the restart of production operations in Mine Unit 5-2 (MU 52) area. Accordingly, the WDEQ-LQD approved this NSR on March 12, 2012 as Change No. 44.

As you are aware, and as we have discussed, the current approved monitoring plan did not work out as envisioned. Soon after the restart of the MU 52 area monitor wells 5AH57-1, 5AG70-1 and 5AV46-1 went on excursion status. These wells, which were previously injection or production wells, were used in the monitoring plan to complete the new monitor well ring thru the MU 51 and 53 areas. These areas were previously mined and restored, and as discussed above, the UCLs for these wells (as well as well 5AW54-2) were calculated from new "baseline" samples from the existing restored water quality.

During the initial startup of the MU 52 area there was considerable debris in the pipelines and a significant amount of the production flow was diverted to the wastewater ponds and little injection flow was returned to the wellfield area. This apparently had the effect of pulling adjacent ground water of differing quality to these monitor wells. Due to the net over-production of fluid from this area and the lack of change at the monitor ring wells at the historic MU 5 monitor wells, Uranium One is confident that these wells have not been impacted by injection fluids in the MU 52 area. Additionally, although the change in water quality and subsequent exceedance of the UCLs at these monitor wells was reported as "excursions", the associated area is within previously mined and restored areas and the existing MU 5 monitor well ring.

Uranium One is confident that the revised monitoring plan included herein to monitor conditions associated with the restart of production activities in the MU 52 area is adequate to ensure that production fluids are retained within the MU 5 monitor well ring and the Aquifer Exemption area.

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An "Index to Change Sheet" and two copies of all revised material are included.

If you have any questions please do not hesitate to contact me at 307-233-6329 or via email at bill.kearney@uranium1.com

Sincerely,

W. F. Kearney
Director SHE
Uranium One Americas

Encl: Index to Change Sheet and accompanying revised materials

Cc: Ron Linton – NRC Project Manager – Rockville MD w/ encl.
J. Winter- Manager Environmental and Regulatory Affairs w/enclo
T. McCullough – Site SHE Manager – Willow Creek Project w/ encl
B. Koch- Willow Creek Mine Manager

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INDEX SHEET FOR MINE PERMIT AMENDMENTS OR REVISIONS

Date 05/10/2012
TFN

MINE COMPANY NAME: **Uranium One USA, Inc.** MINE NAME: **Christensen Ranch (Willow Creek)** PERMIT NO: **478**

Statement: I, **Jon Winter**, an authorized representative of **Uranium One USA, Inc.** declare that only the items listed on this and all consecutively numbered Index Sheets are intended as revisions to the current permit document. In the event that other changes inadvertently occurred due to this revision, those unintentional alterations will not be considered approved. Please initial and date. **05/10/2012**

NOTES: 1) Include all revisions or change elements and a brief description of or reason for each revision element.
2) List all revision or change elements in sequence by volume number; number index sheets sequentially as needed.

VOLUME NUMBER	PAGE, MAP OR OTHER PERMIT ENTRY TO BE REMOVED	PAGE, MAP OR OTHER PERMIT ENTRY TO BE INSERTED	DESCRIPTION OF CHANGE
Mine Unit 5 Wellfield Data Package – Addendum I	Remove page 5 of Addendum I	Insert revised page 5 and new page 6	Added new section "A.5 May 10, 2012 Revision to Monitoring Plan"
Mine Unit 5 Wellfield Data Package – Addendum I	Remove Table A-2	Insert revised Table A-2	Revised Mine Unit 5 Monitoring Wells Sample Schedule, added additional perimeter monitoring wells to the monitor well ring, and changed the status of wells previously used as "Ring Wells" to "Trend Wells."
Mine Unit 5 Wellfield Data Package – Addendum I	Remove Figure A2	Insert revised Figure A2	Revised Figure to show new perimeter monitor well ring, trend wells, and area previously encompassed by the original MU 5-2 NSR monitor well ring.

will be sampled during restoration and compared to the TRV established for all of MU 5. As stated in Section A.1 of this Addendum, Uranium One will utilize the TRV's previously established for MU 5 when restoring the Module 52 area.

A.3 RESULTS OF HYDROLOGIC STUDIES

No additional hydrologic investigations were conducted to facilitate the re-entry of Module 52 area for mining. Hydrologic investigations were previously performed for all of the MU 5 area and are presented in Section 3.0 and Appendix II (Christensen Ranch Unit 5 Pump Testing: Results and Analyses Summary) of the original MU 5 Wellfield Data Package.

A.4 CONCLUSIONS

Re-entry in to portions of MU 5 was identified as a potential back in the 2008. Mining of Module 52 will be operated following the same procedures identified in Permit to Mine No. 478, A-2. Mining in this module will be conducted like any other mining area at the Willow Creek Project including following Operating Procedures set forth in Section 3.0; the Effluent Controls set forth in Section 4.0; the Management Provisions in Section 5.0; and the Reclamation and Restoration Provisions identified in Section 6.0

Re-entry into this area of MU 5 will negate the ongoing review by the WDEQ of restoration success for Module 52 area as presented in the Wellfield Restoration Report submitted in 2008. It is logical to assume that after In-situ Recovery (ISR) operations are complete for this small area, not ***all*** of MU 5 would require re-demonstrate of adequacy of restoration, yet restoration efforts would focus on the Module 52. Thus, upon completion of ISR operations the Module 52 area will undergo restoration activities to the standards established in Permit No. 478, NRC License 1341 and the MU 5 Wellfield Data Package. The surety instrument currently in place for the Willow Creek Project does include costs for groundwater restoration for all of MU 5, thus no surety adjustment will be necessary for this Non-Significant Revision. It is anticipated ISR operations will last for one to two years in Module 52.

A.5 May 10, 2012 Revision to the Monitoring Plan

Soon after the restart of the MU 52 area monitor wells 5AH57-1, 5AG70-1 and 5AV46-1 went on excursion status. These wells, which were previously injection or production wells, were used in the monitoring plan to complete the new monitor well ring thru the MU 51 and 53 areas. These areas were previously mined and restored, and as discussed above, the UCLs for these wells (as well as well 5AW-54-2) were calculated on the existing restored water quality.

During the initial startup of the MU 52 area there was considerable debris in the

pipelines and a significant amount of the production flow was diverted to the wastewater ponds and little injection flow was returned to the wellfield area. This apparently had the effect of pulling adjacent ground water of differing quality to these monitor wells. Due to the net over-production of fluid from this area and the lack of change at the monitor ring wells at the historic MU 5 monitor wells, Uranium One is confident that these wells have not been impacted by injection fluids in the MU 52 area. Additionally, although the change in water quality and subsequent exceedance of the UCLs at these monitor wells was reported as "excursions", the associated area is within previously mined and restored areas and the existing MU 5 monitor wells ring.

Therefore, a revised monitoring plan is presented herein that will enhance the currently approved plan by adding four existing MU 5 monitor ring wells (wells 5MW36, 5MW37,5MW48 and 5MW47B) to the routine monitoring plan and will retain wells 5AH57-1, 5AG70-1, 5AW-54-2 and 5AV46-1 in the routine monitoring plan as "Trend Wells". Table A-2 and Sheet A2 have been revised accordingly. This revised plan will remove wells 5AH57-1, 5AG70-1 and 5AV46-1 from excursion status and the continued monitoring of the wells as Trend Wells will permit further assessment of changing ground water quality conditions within the previously mined and restored areas. As with the current approved monitoring plan all the MU 5 monitor wells area monitored every quarter. This revised monitoring plan is very adequate to monitor conditions associated with the restart of production activities in the MU 52 area and ensure that production fluids are retained within the MU 5 monitor well ring and the Aquifer Exemption area.

Table A-2
Mine Unit 5 Monitoring Wells, Sample Schedule and UCLs

Well ID	Module	Sampling Frequency	UCLs		
			Chloride (mg/l)	Conductivity (usmho/cm)	Alkalinity (mg/l as CaCO3)
Mine Unit 5 - Module 52					
Deep Wells					
5DM4*	**52**	Bi-weekly	22.8	1017.4	420.9
Designated Restoration Wells					
5AO74-1	**52**		**Target Restoration Wells not sampled on a Bi-weekly basis**		
5AP54-1	**52**				
Shallow Wells					
WCOW4*	**52**	Bi-weekly	22.1	2922.0	316.6
Ring Wells					
5MW36*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW37*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW38*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW39A*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW40*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW41*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW42*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW43*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW44*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW45*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW46*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW47B*	**Ring**	Bi-weekly	22.7	1003.9	134.3
5MW48*	**Ring**	Bi-weekly	22.7	1003.9	134.3
Production Area Trend Wells - No UCLs					
5AH57-1	**51**	Bi-weekly			
5AG70-1	**51**	Bi-weekly			
5AW54-2	**53**	Bi-weekly			
5AV46-1	**53**	Bi-weekly			
* UCL values established in February 1995 Mine Unit 5 Wellfield Data Package					

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THIS PAGE IS AN OVERSIZED DRAWING OR FIGURE,

THAT CAN BE VIEWED AT THE RECORD TITLED:
CHRISTENSEN RANCH
MINE UNIT 5
MODULE 5-2 – NON-SIGNIFICANT REVISION
DRAWING NO. SHEET A2

WITHIN THIS PACKAGE...

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