

June 13, 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

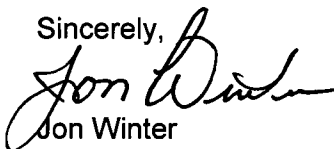
**RE: Permit to Mine No. 478
Christensen Ranch Project Mine Unit 5 – Non-Significant Revision
Revised Monitoring Plan for Mine Unit 5-2 Area
TFN 5 2/325**

Dear Mr. Mooney:

Under cover dated May 10, 2012, Uranium One submitted a Non-Significant Revision (NSR) for a revised monitoring plan for the Mine Unit 5-2 (MU 5-2) to WDEQ-LQD District III. Uranium One received comments regarding this NSR application, under cover dated June 7, 2012, from Glenn Mooney of WDEQ-LQD District III. In response to Review Comment 3, as requested, monitor wells 5MW34, 5MW32A, 5MW30A, 5MW31, 5MW33 and 5MW35A (Table A-2) have been added to the revised MU 5-2 monitoring well network. Also language on Page 6 of the NSR request has been revised to clarify which MU 5 monitor wells will be sampled on a quarterly bases.

If you have any questions or need additional information concerning this MU 5-2 NSR response package please contact me at 307-234-8235 or by email at jon.winter@uranium1.com.

Sincerely,




Jon Winter
Manager of Environmental & Regulatory Affairs, Wyoming

Encl: Index of Changes (2)
Page Replacements (2)

Cc: Ron Linton – NRC Project Manager – Rockville MD w/ encl.
William F. Kearney – Director SHE – w/o encl
T. McCullough – Site SHE Manager – Willow Creek Project w/ encl

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_____ 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. **06/13/2012** 

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 6 of Addendum I NSR	Insert revised Page 6	Added Monitor Wells 5MW34, 5MW32A, 5MW30A, 5MW31, 5MW33 and 5MW35A to the revised perimeter monitor well network for the Module 52. Clarified the statement “As with the approved monitoring plan all of the MU 5 monitor wells monitored every quarter.”
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.

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 5MW34, 5MW32A, 5MW30A, 5MW31, 5MW33, 5MW35A, 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. All other historic Mine Unit 5 monitor wells not listed in Table A-2 will continue to be monitored on a quarterly bases until restoration approval is received from the WDEQ-LQD and the NRC. 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

			UCLs		
Well ID	Module	Sampling Frequency	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					
5MW30A*	Ring	Bi-weekly	22.7	1003.9	134.3
5MW31*	Ring	Bi-weekly	22.7	1003.9	134.3
5MW32A*	Ring	Bi-weekly	22.7	1003.9	134.3
5MW33*	Ring	Bi-weekly	22.7	1003.9	134.3
5MW34*	Ring	Bi-weekly	22.7	1003.9	134.3
5MW35A*	Ring	Bi-weekly	22.7	1003.9	134.3
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					

**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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