



April 27, 2011²_Y

via Email/Overnight Mail

Mr. Ron Linton- Project Manager
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Mail Stop T8F5
Rockville, Maryland 20852-2738

Re: Docket No. 40-8502, License No. SUA-1341
Renewal Application- Review of Draft License Conditions

Dear Mr. Linton:

Uranium One received your correspondence transmitting the draft license and accompanying conditions for the License Renewal for the Willow Creek Project dated April 12, 2012, on April 19, 2012. Uranium One appreciates the opportunity to review and comment on the draft license conditions. Attachment A contains comments, and in some cases recommended revisions to the draft license conditions.

There are a few comments that recommend draft license conditions be deleted or modified in light of the Willow Creek Project operation history under NRC license for over 30 years. Therefore, some data and information requested by NRC is already available, and/or the operating history of the project is such that years of monitoring data has shown that there have been no significant adverse impacts to personnel, the public, or the environment. Uranium One is hopeful that NRC will further recognize the importance of the operating history of the project including the vast amount of monitoring data collected compared to a new project undergoing the initial licensing process.

If you have any questions, or desire to schedule a meeting in order that Uranium One can further any discussions, please call me at your earliest convenience.

Sincerely,

Jon Winter
Manager- Wyoming Environmental and Regulatory Affairs

Enclosures: Attachment A

cc: D. Wichers
W. Kearney
G. Mooney- WDEQ-LQD Sheridan

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Attachment A

Uranium One Review Comments of Proposed License Conditions

License Renewal

License Number SUA-1341

1. RE: Proposed Condition 9.4 b),(vii) - Performance Based License Condition, Reference to EIS

Uranium One Comment: It does not appear that NRC should reference an EIS for the Willow Creek Project Renewal as the last License Renewal was completed under an EA.

2. RE: Proposed Condition 9.8 - Release of Equipment

Uranium One Comment: NRC has added wording to License Condition 9.8 that states “The Guidelines shall apply to the removal of equipment, materials, or packages from restricted areas that have the potential for accessible surface contamination levels above background regardless of the intent to release these items for unrestricted use. The licensee shall document its survey of equipment, materials, or packages prior to removing them from a restricted area.”

Uranium One requests clarification on the intent of this condition as it appears to contradict a common practice of allowing tools with minimal potential for contamination to be utilized on site at non connected restricted areas without having to survey upon exit, as long as said tools or equipment remain in the control of the licensee. This is particularly important for common tools that are used at headerhouses which are considered Restricted Areas. Headerhouses are located at isolated places within wellfield areas. Wellfield areas are considered Controlled Areas. The new wording added to License Condition 9.8 would potentially create an undue burden on the licensee and provide little benefit in a reduction in potential radiological exposure to site personnel or the public. Uranium One would request that the added language to License Condition 9.8 be deleted or modified.

3. RE: Proposed Condition 9.12 – RSO Qualifications etc.

Uranium One Comment 2.A: This proposed license condition requires the submittal of two SOPs to NRC for review and approval. The Willow Creek Project has operated under an NRC license for over 30 years and historically the submittal of SOP’s to the NRC for “review and verification” was not required. Uranium One requests why this action is now required at an operating facility which is subject to at least two routine NRC inspections each year and was subject to preoperational inspections as well.

Uranium One Comment 2.B: Third paragraph starting with “Within 90 days...” limits the transport of resin trucks to only the Willow Creek Project. This license condition needs to recognize that resin trucks will be going to and from other Satellite facilities such as the Moore Ranch and Ludeman projects. It is recommended that this paragraph be rewritten as follows:

“Within 90 days of license renewal, the licensee will develop an SOP and specific training for personnel that do not meet the qualifications of RSO or Health Physics

Technician, as defined in Regulatory Guide 8.31, that are designated to survey resin trucks leaving a restricted area and traveling to another restricted area authorized by the License of the Willow Creek ISR Project.”.

Uranium One Comment 2.C: It is recommended that the last paragraph of the proposed license condition be rewritten as follows:

“The licensee shall describe in an SOP the training provided and procedures used by the RSO designate to conduct daily inspections in the temporary absence of the RSO or Radiation Safety Technician. The SOP for the conduct of daily inspections and training requirements shall be submitted to the NRC for review and verification. Weekly inspections shall be performed by the RSO or his or her designate and follow the recommendations of Regulatory Guide 8.31. The licensee shall describe in an SOP the procedures used to conduct weekly inspections in the temporary absence of the RSO or the Health Physics Technician”.

Uranium One Comment 2.D: Additionally, it should be noted that the first paragraph refers to the “RSO, Health Physics Technicians and Radiation Safety Technicians” while other similar references in this license condition only refer to the “RSO or Radiation Safety Technicians”. It is suggested that NRC be consistent with these references.

4. RE: Proposed Condition 9.15 – Onsite Meteorological Data

Uranium One Comment: Uranium One requests justification for this new requirement as the Willow Creek Project has operated under an NRC license for over 30 years without an on-site meteorological station with no significant impacts to the public, employees, or the environment from airborne or other releases. Additionally, Uranium One does not intend to move any existing approved air monitoring stations as they have been used for many years and it is important that future data collection at these sites be comparable to historic data. Uranium One recommends that this license condition be deleted.

5. RE: Proposed Condition 10.1 – Inward Hydraulic Gradient

Uranium One Comment: The new language added to this license condition “The licensee shall maintain an inward hydraulic gradient in each individual wellfield starting when lixiviant is first injected into the production zone and continuing until the ground water restoration stability monitoring has begun” is not consistent with historic practice and existing WDEQ regulations, and is difficult, or impossible to show/prove with wellfield monitoring data. It is possible to maintain and show/prove a wellfield bleed. Historically, the wellfields have been operated and monitored such that injection fluids and affected groundwater are retained within the monitor well ring and the aquifer exemption area. Uranium One recommends that this license condition be deleted or the term “inward hydraulic gradient” be changed to “bleed”.

6. RE: Proposed Condition 10.3 – Baseline Water Quality Data

Uranium One Comment 5 A: The existing sentence in the current license condition “~~Baseline ground water quality in previously approved production areas shall be the mean data values (well field average) from the following submittals:~~” should not be removed from the proposed License Condition as it still applies to existing wellfields.

Uranium One Comment 5 B: The proposed language in the paragraph starting with “Four samples shall be collected...” is not consistent with the license application. This paragraph should be rewritten as follows:

“Four samples shall be collected and analyzed from each monitor well to establish baseline water quality parameters including the ore zone perimeter, overlying and underlying monitor wells, and mine unit baseline wells. Consecutive sampling events shall be at least 14 days apart. The first round of samples for all wells will be analyzed for Assay Suite A as per Table 5.24 of the License Application. Rounds 2, 3 and 4 for the Ore Zone Perimeter, Upper Aquifer and Lower Aquifer Wells will be analyzed for Assay Suite B as per Table 5.24. Round 2 for the mine unit baseline wells will be analyzed for Assay Suite A and rounds 3 and 4 for the mine unit baseline wells will be analyzed for Assay Suite B as per Table 5.24 of the license application.”

7. RE: Proposed Condition 10.4 – Upper Control Limits

Uranium One Comment: In respect to the first paragraph, Upper Control Limits (UCLs) are not applied to all monitoring wells. This paragraph should be rewritten as follows:

“Prior to mining in each production unit, the licensee shall collect ground water samples and establish Upper Control Limits (UCLs) in accordance with Section 5.8 of the approved license application. UCLs shall be applied to all monitor wells (with the exception of the mine unit baseline wells) in conformance with the approved license application and appropriate SOPs. The UCL parameters shall be chloride, conductivity, and total alkalinity.”

8. RE: Proposed Condition 10.8 B – Yellowcake Dryer Emission Parameters

Uranium One Comment 7 A: The two paragraphs contain contradictory requirements in regards to manual readings of monitoring equipment (every 12 hours vs. every hour). The two paragraphs are also redundant in that the first paragraph lists the emission control monitoring parameters (the scrubber flow rate and differential pressure) while the second paragraph states these emission control parameters must be identified.

Uranium One Comment 7 B: The second paragraph also requires that certain scrubber operational procedures be included in a SOP. This information is included in an existing SOP titled “Drypack – Scrubber System”. This SOP was reviewed by NRC prior to restart of drying activities and the procedure is currently being used during drying activities. It is unclear why this information is being requested in a SOP when it is already in place.

9. RE: Proposed Condition 10.14 – Heldt Draw Baseline Monitoring

Uranium One Comment: The proposed license condition is out dated as Mine Unit 8 located within the Heldt Draw area is substantially constructed at this time (April 2012). Therefore, it is not possible to obtain four baseline surface water samples from Heldt Draw prior to wellfield construction. It should be noted that Heldt Draw is a relatively small ephemeral drainage with a grass lined swale that only flows surface water in direct response to large rainfall and/or snowmelt events. It may not flow water though its entire reach for long periods of time (many months to years).

Given the ephemeral nature of the Heldt Draw, and the fact that there is a surface water monitoring plan for Willow Creek at three locations downstream of the confluence of

Heldt Draw and Willow Creek (Site GS-1, IR-14 and IR-1) Uranium One does not see the reason to include an additional surface water monitoring site in the surface water monitoring plan to be used during operations (Table 5.24). Uranium One recommends that this license condition be deleted.

10. RE: Proposed Condition 10.15 - Post-Restoration Groundwater Monitoring

Uranium One Comment 9 A: The existing language “The licensee shall conduct ground water restoration and post-restoration monitoring as described in Section 6.1 of the approved license application” conflicts with the new language “The licensee shall conduct sampling of all constituents of concern on a quarter year basis during stabilization monitoring”, to the current post-restoration stability monitoring plan in Section 6.1.2.4- Stabilization Monitoring and Table 6.1- Restoration Groundwater Monitoring Schedule and Analyses of the license application. In Section 6.1.2.4, Uranium One commits, in accordance with WDEQ regulations and approved permits, to conduct post-restoration stabilization monitoring for a period of 12 months and sample designated restoration wells at the beginning, middle and end of this 12 month period. Further, these samples will be analyzed for a full suite (WDEQ-LQD Guideline 8, Assay Suite A) of chemical and radiological parameters.

Uranium One Comment 9 B: Uranium One requests a definition of “constituents of concern” as it is not clear what they are in reference to. Possibly Criterion 5(B)(6) parameters?

Uranium One Comment 9 C: The language “The applicant shall continue the stability monitoring until the data show the most recent four consecutive quarters indicate no statistically significant increasing trend for all constituents of concern which would lead to an exceedance above the approved target restoration values.” also conflicts with the license application and WDEQ regulations. Prolonged post-stabilization monitoring (greater than one year) is not proposed in Section 6.1 of the license application, it is also contrary to the currently approved post-restoration stability monitoring practices. Post-restoration stabilization monitoring, currently approved of by both the NRC and WDEQ-LQD, consists of samples being taken from designated restoration wells for a 9 month to one year period. This duration of stability monitoring has used by both NRC and the WDEQ for approval of existing restored wellfields as well as wellfields currently under review for concurrence of the completion of ground water restoration.

11. RE: Proposed Condition 11.3 - Effluent, Personnel and Environmental Monitoring Programs

Uranium One Comment 10 A: General comment. Uranium One does not understand the need for much of this detailed radionuclide monitoring data when the facility was in operation for approximately 30 years and a considerable database exists for radionuclide monitoring at both in- plant and environmental monitoring sites. Moreover, this extensive database shows that occupational exposures have always been than 10% of applicable NRC limits and the monitoring at the restricted area boundary continuously show compliance with NRC limits. Similarly, review of the historic environmental monitoring at Irigaray environmental air monitoring locations indicate that the Ra-226 and Th-230 ratios under 10 CFR 20.1204(g) would allow them to be disregarded and uranium would become the most restrictive radionuclide DAC. Uranium One would not anticipate that the ratios of the radionuclide’s would be any different for in-plant monitoring locations at Irigaray or the Christensen Satellite Plant whose primary airborne

consistent is radon. Additionally, if the contents of this proposed license condition are retained it should be modified such that occupational, effluent and environmental requirements are separated.

Uranium One Comment 10 B: The third paragraph makes reference to obtaining air samples for radionuclide analysis at the Christensen Ranch environmental monitoring sites to ensure compliance with 10 CFR 20.1204(g). It is unclear why data collected at the environmental sites needs to be obtained and compared to occupational dose requirements.

Uranium One Comment 10 C: In respect to the section that requests the licensee to develop written procedures for NRC verification for radiological surveys, how exposures to the public will be determined, how radon progeny will be factored into public dose estimates, Uranium One recommends that these requirements be deleted as the information has been forwarded to the NRC and/or reviewed by NRC on an annual basis.

12. RE: Proposed Condition 11.8 - Evaluation of New Ground Water Wells

Uranium One Comment 11 A: The proposed language “the evaluation shall be submitted as part of the annual reporting to the NRC for review” is confusing as Uranium One is required, in accordance 10 CFR 40.65, to submit semi-annual reports, not annual reports. Additionally, this license condition belongs in Section 12- “Reporting Requirements” since it contains an “annual reporting” requirement for submittal to NRC.

Uranium One Comment 11 B: Uranium One requests a better understanding of the intent of the condition and our ability to “identify the location, screen depth, and estimated pumping rate of any new ground water wells or use within two kilometers of a production area”, if such wells are outside the permit area. Wyoming State Engineer records can be reviewed each year to assess if any new wells were potentially installed, but the availability of the specific information requested (pumping rate, “new use”) may not be. Moreover, the Willow Creek Project has operated in various capacities for over 30 years with no adverse impact to adjacent ground water users. In the case that ground water quality of adjacent wells was adversely impacted by ISR (or any other operation for that matter), such a condition falls under State of Wyoming laws and the jurisdiction of the WDEQ. Similarly, in the case that the ground water availability or pumping capacity of adjacent wells was adversely impacted by ISR operations, such a condition falls under State of Wyoming laws and the jurisdiction of the Wyoming State Engineer.

13. RE: Proposed Condition 12.1 – Semi - Annual Report Requirements

Uranium One Comment: NRC has added several new requirements to the semi-annual (40.65) reports that are not required by 10 CFR 40.65 (limited to “effluent monitoring reporting”). This includes the “status of wellfields in operation or restoration”, and “a summary of integrity tests during the reporting period”. These items are not related to effluent monitoring. Additionally, Uranium One surmises that the “integrity tests” requested are Mechanical Integrity Test (MIT) results for injection wells. It is not clear what NRC expects to be submitted to meet this new requirement. Additionally, in accordance with EPA and WDEQ regulations, the results of Mechanical Integrity Test (MITs) and associated information, is submitted to the WDEQ in required WDEQ Quarterly Reports. Uranium One requests that NRC provide the regulatory basis requiring the submittal of this information to NRC, and for what purpose NRC will use the information.