



GE Corporate Environmental Programs

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Mr. Keith I. McConnell, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
2 White Flint, Mail Stop T7 E-18
Rockville, MD 20852-2738

Re: License Amendment Request for Condition 35
Source Materials License SUA-1475 (TAC LU0092)

Dear Mr. McConnell:

United Nuclear Corporation (UNC) proposes to amend the subject license to reflect a modified reclamation schedule as follows:

Existing Condition

- 35.A. To ensure compliance with target completion dates established in the Memorandum of Understanding with the Environmental Protection Agency (56FR, October 25, 1991), the licensee shall complete reclamation to control radon emissions as expeditiously as practicable, considering technological feasibility, in accordance with the following schedule:
- (3) Placement of final radon barrier designed and constructed to limit radon emissions to an average flux of no more than 20pCi/m²/s above background - December 31, 1997.
- B. Reclamation, to ensure required longevity of the covered tailings and groundwater protection, shall be completed as expeditiously as is reasonably achievable, in accordance with the following target dates for completion.
- (1) Placement of erosion protection as part of reclamation to comply with Criterion 6 of Appendix A of 10 CFR Part 40 - December 31, 1997.
 - (2) Projected completion of groundwater corrective actions to meet performance objectives specified in the groundwater corrective action plan - December 31, 1997.

Justification

Placement of the final radon barrier and erosion protection hinge on the completion of groundwater corrective actions because the groundwater corrective action program includes two evaporation ponds that are constructed on top of the otherwise fully reclaimed tailings impoundments. The evaporation ponds have to be dismantled to allow for the final radon barrier and erosion protection to be completed within the footprint of the evaporation ponds. Thus conditions 35.A.(3) and 35.B.(1) have met the target date for completion everywhere except for the evaporation pond footprint, and it seems that for this reason (and the uncertainty in estimating the groundwater corrective action completion date) the license has not been updated. This license amendment request is to adopt more realistic completion dates that take into consideration the on-going groundwater corrective action program and the need to maintain the evaporation ponds until the groundwater corrective action program is completed.

EPA and the NRC assume joint oversight of the groundwater corrective action program under a Memorandum of Understanding. To date, the groundwater corrective action program has not achieved the remediation goals set by EPA for that part of the program for which it has primary oversight. EPA's decision document (the 1988 *Record of Decision*) anticipated that some of its cleanup standards would have to be waived or re-evaluated due to technical and operational limitations. None have been recommended by EPA either before the passage of the December 31, 1997 date or after.

EPA has decided to conduct a new site feasibility study with the goal of meeting the 1988 *Record of Decision* objectives or to determine whether such standards can be met (see EPA's Second Five-year Review Report, September 2003). Citing its authority under the Unilateral Administrative Order, Docket No. CERCLA 6-11-89, EPA directed UNC to perform the new feasibility study (EPA letter dated June 23, 2006). In a November 22, 2006 letter, EPA further directed UNC to examine potential changes to regulatory standards "in light of regulatory developments since the 1988 ROD". UNC has recently submitted its findings concerning the examination of changes to regulatory standards (February 22, 2007), and is awaiting EPA response.

It is difficult for UNC to estimate the length of time that it will take EPA to complete the feasibility study process. Based on past experience, UNC assumes that this process, culminating in a public commenting process and a revised decision document, might be completed by January 31, 2009. There are multiple possible outcomes to the revised EPA decision document. One is that some form of remediation continues; the other is that the appropriate waivers are granted and the groundwater corrective action is deemed to be complete. It is UNC's best estimate that the latter outcome is the more likely of the two; however, UNC believes that it would be appropriate to adopt a significant contingency factor so as to avoid the need to amend the license again for the same reasons. We therefore recommend that December 31, 2010 be set as the date to complete groundwater corrective actions. We further estimate that one construction season will be required to complete the radon barrier and erosion protection following the date of groundwater corrective action completion, and so we recommend adopting the date of December 31, 2011 for these activities.

Proposed Amendment Text

35.A. To ensure compliance with target completion dates established in the Memorandum of Understanding with the Environmental Protection Agency (56FR, October 25, 1991), the licensee shall complete reclamation to control radon emissions as expeditiously as practicable, considering technological feasibility, in accordance with the following schedule:

(3) Placement of final radon barrier designed and constructed to limit radon emissions to an average flux of no more than 20pCi/m²/s above background - December 31, 2011.

C. Reclamation, to ensure required longevity of the covered tailings and groundwater protection, shall be completed as expeditiously as is reasonably achievable, in accordance with the following target dates for completion.

(1) Placement of erosion protection as part of reclamation to comply with Criterion 6 of Appendix A of 10 CFR Part 40 - December 31, 2011.

(2) Projected completion of groundwater corrective actions to meet performance objectives specified in the groundwater corrective action plan - December 31, 2010.

Please contact me if you have any questions. As of September 1997 United Nuclear Corporation became a wholly-owned, indirect subsidiary of General Electric Company. GE Corporate Environmental Programs has been retained through a separate administrative services agreement to assist UNC both technically and administratively with environmental issues at the Church Rock site.

Sincerely,



Roy S. Blickwedel, P.G.
Remedial Project Manager
Corporate Environmental Programs

cc: Paul Michalak, NRC
Mark Purcell, USEPA
Larry Bush, UNC
Mark Jancin, N.A. Water Systems