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Date: 6/16/2006 1:37:04 PM
Subject: EPA Comments on EA

Paul,

I have attached the draft EPA comments on the EA. I will not have the time to get the letter out today and I am out of the office all next week, except Friday. I will send you the formal letter on Friday. If you have any concerns with the draft comments, please let me know when I get back.

I have also made a couple small edits to your text for your consideration. Text attached.

Mark

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(See attached file: EPA Cmts 061506.doc)(See attached file: EA_revised Zone 3.doc)

CC: <dana.bahar@state.nm.us>, <adrian.stein@state.nm.us>

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EPA COMMENTS

On the

U.S. Nuclear Regulatory Commission's
Draft Environmental Assessment Related to the Issuance of a License Amendment
For Modification of Ground-Water Protection Standards
United Nuclear Corporation Church Rock, New Mexico Project Site (TAC No. LU0117)

General Comment:

The U.S. Environmental Protection Agency (EPA) considers the proposal for revising the current chloroform and combined radium-226 and -228 ground-water protection standards for the United Nuclear Corporation (UNC) Church Rock Superfund site (Site), Church Rock, New Mexico, to be reasonable. The EPA recognizes the importance of determining background concentrations in media when selecting site cleanup criteria. Generally, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), cleanup levels are not set at concentrations below natural or anthropogenic background levels. The reasons for this approach include cost-effectiveness, technical practicability, and the potential for recontamination of remediated areas by surrounding areas with elevated background concentrations.

Further, EPA recognizes that there are two regulatory authorities responsible for establishing cleanup levels for the Site: (1) the U.S. Nuclear Regulatory Commission (NRC), pursuant to Source Materials License No. SUA-1475 and the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978 for ground water at the former UNC mill site, and (2) EPA, pursuant to the 1988 Record of Decision (ROD) under CERCLA for ground water remediation outside of the tailings disposal area.

At this time, concurrent with the NRC effort, EPA is also reassessing the appropriateness of several Site cleanup levels originally established by EPA in the ROD since EPA has promulgated new Maximum Contaminant Levels (MCLs) under the Safe Drinking Water Act (SDWA) and there are new ground-water standards for the State of New Mexico. In the EPA's Second Five-Year Review Report (Report), dated September 2003, EPA documents these new MCLs and State ground-water standards in a review of Applicable or Relevant and Appropriate Requirements (ARARs) for the Site. Additionally, since Superfund remedial actions must meet ARARs (unless such requirements are waived by EPA), EPA documents (in the Report) the need for reassessment of the Site cleanup criteria to address the long-term protectiveness of the EPA's ground-water remedy. The EPA further determines that a Site-wide Supplemental Feasibility Study (SFS) shall be performed to investigate possible remedial alternatives and to support future EPA decision-making under CERCLA.

The EPA has directed UNC to implement the SFS. The assessment of the appropriateness of the new MCLs and State of New Mexico standards for this Site will be part of the SFS. Any revision of EPA's current Site cleanup criteria under CERCLA will be made by EPA in a ROD Amendment or Explanation of Significant Difference (ESD).

Specific Comments:

1.0 Section 4.1, Hydrogeology, pages 5 and 6:

The EPA has stated in the ROD that mine water discharges significantly recharged the Southwest Alluvium and Zones 1 and 3 of the Upper Gallup Sandstone. This determination was based on the findings of the Site Remedial Investigation (RI). Therefore, EPA does not agree with Section 4.1 that the three units were unsaturated prior to the discharge of mine water into the Pipeline Arroyo. This position was further documented in EPA's Second Five-Year Review Report, dated September 2003. The EPA has not changed its position on the origin of the water within these three zones.

2.0 Section 4.2, Water Quality, page 6, paragraphs 2, 3 and 4:

The EPA's ROD did not identify specific contaminants of concern for specific units. Table 2 identified a list of contaminants for the Site and their specific ground-water Applicable or Relevant and Appropriate Requirements (ARARs). It is recommended that the reference to the ROD is deleted from the paragraphs.

3.0 Section 5.2, Cumulative and Health Effects, page 7:

The EPA does not agree with the last sentence of the paragraph, which states "*radiological impacts associated with ambient background concentrations are small because the revised combined radium-226 and -228 GWPSs represent ambient background concentrations in their respective saturated units.*" It is EPA's policy to include background concentrations of contaminants in the assessment of risk to public health and the environment, particularly when their concentrations exceed risk-based concentrations. In cases where background levels are high or present health risks, this information can be important to the public.

DRAFT

~~The Zone 3 system was shut down in June 2000 for maintenance and repairs. Prior to the Zone 3 system being brought back online, both the NRC and the US EPA agreed that the existing system should be decommissioned, with a provision that UNC should submit a modified corrective action plan, an application for Alternative Concentration Limits, or an alternative to the specific requirements of 10 CFR Part 40, Appendix A if the License No. SUA-1475 ground-water protection standards are not achievable.~~

Zone 3's North-East Pump-Back wells and Stage I extraction wells have been decommissioned based on criterion that allow decommissioning of wells that produce less than 1 gpm following well redevelopment. Zone 3 Stage II extraction wells have been temporarily shut down due to poor recovery rates, with the approval of EPA, NMED, and NRC (US EPA 2003). With the shut down of the Stage II extraction wells, active remediation of the Zone 3 ground water contaminant plume ceased. UNC has agreed to submit a modified corrective action plan, an application for Alternative Concentration Limits, or an alternative to the specific requirements of 10 CFR Part 40, Appendix A if the License No. SUA-1475 ground-water protection standards are not achievable. Currently, monitoring of the "natural system's" ability to stabilize seepage impacts into Zone 3 is continuing. Reportedly, UNC is conducting an ongoing extended pilot investigation to evaluate the suitability of hydrofracturing to enhance the remedy for cutoff and containment of the migrating seepage-impacted Zone 3 water. Additionally, EPA has approved a second pilot study for testing in-situ alkalinity stabilization to stop further migration of the seepage-impacted Zone 3 water.