



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

Via First Class Mail

July 18, 2006

Paul Michalak  
U.S. Nuclear Regulatory Commission  
Mail Stop: T8F42  
Washington, D.C. 20555-0001

Re: NRC Environmental Assessment on Ground-Water Protection Standards  
United Nuclear Corporation Church Rock Site  
Gallup, New Mexico

Dear Mr. Michalak:

The United States Environmental Protection Agency (EPA) has completed its review of the draft document entitled "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)." Enclosed please find the EPA comments.

Please note that these comments were previously provided to you as an attachment to a June 16, 2006 e-mail.

If you have any questions, please contact me via telephone at 214.665.6707 or by e-mail at [Purcell.mark@epa.gov](mailto:Purcell.mark@epa.gov).

Sincerely,

A handwritten signature in black ink, which appears to read "Mark D. Purcell", is written over a horizontal line.

Mark D. Purcell  
Remedial Project Manager  
Superfund Division

Enclosure

Cc: A. Stein, NMED  
D. Malone, Navajo Nation EPA  
L. Bush, UNC

## **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.