



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

February 2, 2000

Mr. Roy Blickwedel, P.G.  
General Electric Company  
640 Freedom Business Center  
King of Prussia, PA 19406

40-8901

RE: *Ground Water Monitoring Network Program for the United Nuclear Church Rock Site*

Dear Mr. Blickwedel:

The following document has been received and reviewed by the U.S. Environmental Protection Agency (EPA), Nuclear Regulatory Commission (NRC), and the New Mexico Environment Department (NMED):

*Source Materials License SUA-1475, Technical Support for Proposed License Amendments, dated January 13, 2000, transmitted by Earth Tech*

The following comments are offered pursuant to the review by the EPA, NRC, and NMED. The document should be modified as so indicated in the following comments, and resubmitted in final form.

**General Comments:**

The purpose of amending the United Nuclear Church Rock Superfund Site (United Nuclear) ground water monitoring program is to ensure that the voluminous amount of data that is being generated is accurate and representative of actual field conditions. The revised ground water monitoring program was developed pursuant to the changing ground water conditions, i.e., decreased saturation levels, at the United Nuclear site. The proposed monitoring program utilizes low-flow sampling protocols and should ensure that ground water conditions are accurately depicted, and if any statistical increases in concentrations occur, they should be detected. The ground water monitoring wells in the program shall be analyzed quarterly to determine if target constituent concentrations statistically increase over time. If the concentrations do statistically increase, additional remedial activities may be necessary.

The Standard Operating Procedure: Ground Water Sampling (SOP) does not contain any information on Quality Assurance and Quality Control (QA/QC) samples that will be collected during field sampling events. What QA/QC samples will United Nuclear collect during ground water sampling events? For example, will rinsate blanks, replicates, temperature blanks, matrix spike, and/or matrix spike duplicates be utilized to ensure that an acceptable level of QA/QC is performed? Please specify the QA/QC protocols that will be utilized.

**Specific Comments:**

Page 2, first paragraph:

The letter states that "...wells can no longer be sampled because of saturation loss or poor performance (lack of water level and/or water quality stabilization) during low flow purge testing." Please

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explain in more detail what is meant by the term "poor performance". What was the rationale used to determine if a well fell into this category?

Page 2, second paragraph:

There is a discussion about well 141 becoming plugged with over 70 feet of silt. Will well 141 be added to the list of wells which will be properly abandoned? Please provide the information.

Table 2 and Figure 2:

The three northernmost wells in Zone 3 have been deleted from the monitoring program. What is the rationale for deleting these wells. The information provided in Table 2 and the information provided in Figure 2 does not agree. The information should be reconciled. An additional northern point of compliance well should be added to the monitoring program.

SOP, Step 2g:

A stabilization target range was not presented for temperature. A range must be given so the field samplers will know when the temperature parameter has stabilized. In addition, dissolved oxygen should be added to the parameter list. If United Nuclear will be pursuing utilizing monitored natural attenuation in the future, additional field parameters may also be warranted.

SOP, Step 3b:

The SOP states that "...for the first two sampling events, both filtered and non-filtered samples will be prepared. After the analytical results of these samples are compared, Table 2 will be updated to indicate whether filtered or non-filtered samples will be collected." Please be aware that it is EPA Region 6 policy to collect unfiltered samples for ground water quality parameter analysis. However, filtered samples may be collected for comparison purposes.

SOP, Step 3d:

The SOP states that samples will be shipped to a "qualified laboratory" for analysis. What laboratories are being proposed for performing the analysis? What is the definition of a "qualified laboratory"? Please provide the rationale for laboratory selection, and what steps will be taken if the laboratory does not meet required QA/QC requirements.

If you, or your technical consultants, have any questions regarding these comments, please do not hesitate to call me at 214.665.8317, or I may be contacted via e-mail at [lyssy.gregory@epa.gov](mailto:lyssy.gregory@epa.gov).

Sincerely yours,

  
Greg J. Lyssy  
RPM

cc: Jane Gunn - NRC  
✓ Ken Hooks - NRC  
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Levon Benally - Navajo EPA  
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