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March 2, 2000

US Nuclear Regulatory Commission
Thomas H. Essig, Branch Chief
Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards
Mail Stop T-7J9
Washington, D.C. 20555

40-8907

Re: **License Amendment Request**
Compliance Monitoring Program
Source Material License SUA-1475

Dear Mr. Essig:

United Nuclear requests an Amendment to Source Material License SUA-1475, Condition 30. This request represents a revised compliance monitoring program, which reflects the changed conditions at the site. The proposed compliance monitoring program also anticipates NRC's approval of EPA's recommendation, in the Five-Year Review, to shut-off the groundwater systems in Zone 1 and Zone 3. The revised monitoring program defines long-term observation wells in a manner that will maintain continuity with previously obtained water quality and water level data. The proposed license change also eliminates wells, which have gone dry or can no longer be sampled.

EXISTING CONDITIONS

30. The licensee shall implement a compliance monitoring program containing the following:
- A. Sampling wells GW-1-4; EPA Wells 1-28, and EPA-22A (excepting EPA Wells 6, 10, 16, 19, 20, 21, 22, 24, and 26); and Wells 411, 420, 501-B, 502-B, 504-B, 509-D, 515A, 516A, 517, 518, 604, 614, 619, 632, TWQ-90, TWQ-106D, TWQ-29A, TWQ-141, TWQ-142, and TWQ-143, on a quarterly frequency for chloride, nitrate, sulfate, ammonia, manganese, calcium, magnesium, sodium, bicarbonate, potassium, field-PH, TDS, and water level, and on a semiannual frequency for arsenic, beryllium, cadmium, chloroform, lead, lead-210, nickel, combined radium-226, and 228, selenium, thorium-230, uranium, gross alpha and vanadium. Well TWQ-126 shall be monitored for water level quarterly.

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Notwithstanding the above, the licensee is only required to sample EPA wells after receipt of written authorization by the land owner to enter that area for the purpose of sampling groundwater from those specified wells. The licensee shall make every reasonable effort to obtain such authorization. If authorization is not obtained, the licensee shall inform the NRC, promptly.

JUSTIFICATION

This condition no longer reflects the present state of the compliance monitoring program and needs to indicate the sampling wells which are still viable or are needed as future data sources. The proposed amendment text delineates the recommended compliance monitoring wells and identifies the water level monitoring wells.

Ammonia analysis is eliminated, since it was concluded not to be responsible for the observed nitrate concentrations (Canonie Environmental Services Corp., 1988, "Evolution of Ground Water Chemistry, Church Rock Site, Gallup, New Mexico", July).

PROPOSED AMENDMENT TEXT

30. The licensee shall implement a compliance monitoring program containing the following:

- A. Sampling wells GW-1-3; EPA Wells 2, 4, 5, 7, 14, 23, 25, and 28, and Wells 420, 504-B, 509-D, 515A, 517, 604, 613, 614, 624, 627, 632, 711, 802, 803, and TWQ-142, on a quarterly frequency for chloride, nitrate, sulfate, manganese, calcium, magnesium, sodium, bicarbonate, potassium, field-PH, TDS, arsenic, beryllium, cadmium, chloroform, lead, lead-210, nickel, combined radium-226, and 228, selenium, thorium-230, uranium, gross alpha, vanadium, and water level. Wells EPA 8, 9, 13, and TWQ-143, 402, 412, 424, 446, 501A, 502A, 504A, 505A, 701, 702, 706, 707, 710, 712, 713, 714, 717, 719, 801, 805, 807, and 808, shall be monitored for water level on a quarterly frequency.

Notwithstanding the above, the licensee is only required to sample EPA wells after receipt of written authorization by the land owner to enter that area for the purpose of sampling groundwater from those specified wells. The licensee shall make every reasonable effort to obtain such authorization. If authorization is not obtained, the licensee shall inform the NRC, promptly.

EXISTING CONDITION

- C. Implement a corrective action program in Zone 1 in accordance with the June 14, 1990, and July 1, 1991, amendment requests, with the addition of EPA-7 as a seepage collection well. Implement a corrective action program in Zone 3 in accordance with "Amendment 1, Reclamation Plan, License No. SUA-1475" submitted by letter dated July 26, 1988, with the exception that wells 608, 702, 712, 713, 714, and 715 may be utilized as water level monitor wells rather than seepage collection wells. Implement a corrective action program in the alluvium in accordance with "Amendment 2, Reclamation Plan, License No. SUA-1475" submitted by letter dated March 29, 1989, with the objective of returning the concentrations of arsenic, beryllium, cadmium, chloroform, gross alpha, lead, lead-210, nickel, radium-226 and 228, selenium, thorium-230, uranium and vanadium to the concentration limits specified in Subsection (B). No corrective action program component, meeting the abandonment criteria stated in the March 29, 1989, submittal, shall be decommissioned without obtaining prior NRC approval. Additionally, a fourth seepage collection well shall be installed and operated in the alluvial aquifer as stated in the April 1, 1991, submittal.

The licensee shall on a semiannual frequency, submit a ground-water monitoring report as well as submit a corrective action program review, by December 31 of each year, that describes the progress towards attaining ground-water protection standards. In the 1994 corrective action program review, the effects of the modified seepage recovery efforts in Zone 3 shall be evaluated. [Applicable Amendments: 2, 4, 7, 11, 19, 21]

JUSTIFICATION

This condition has been modified to indicate the change in status of specific wells with respect to Zone 1, Zone 3, and alluvium. Some wells have been eliminated, while other have had their primary purpose changed. These changes represent a more realistic listing of the present corrective action system and is in agreement with the Five-Year Review Report dated September, 1998. The fourth seepage collection well has been installed and is being operated, well 808. Language requiring the installation has been deleted.

PROPOSED AMENDMENT TEXT

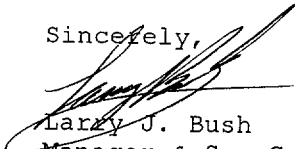
- C. Implement a corrective action program in Zone 1 in accordance with the June 14, 1990, and July 1, 1991, amendment requests, with EPA-7 as a water quality and water level monitoring well. Implement a corrective action program in Zone 3 in accordance with "Amendment 1, Reclamation Plan, License No. SUA-1475" submitted by letter dated July 26, 1988, with the exception that wells 701, 702,

706, 707, 710, 712, 713, 714, 717, and 719 may be utilized as water level monitor wells rather than seepage collection wells. Implement a corrective action program in the alluvium in accordance with "Amendment 2, Reclamation Plan, License No. SUA-1475" submitted by letter dated March 29, 1989, with the exception that well 801 will be monitored for water level only, with the objective of returning the concentrations of arsenic, beryllium, cadmium, chloroform, gross alpha, lead, lead-210, nickel, radium-226 and 228, selenium, thorium-230, uranium and vanadium to the concentration limits specified in Subsection (B). No corrective action program component, meeting the abandonment criteria stated in the March 29, 1989, submittal, shall be decommissioned without obtaining prior NRC approval.

The licensee shall on a semiannual frequency, submit a ground-water monitoring report as well as submit a corrective action program review, by December 31 of each year, that describes the progress towards attaining ground-water protection standards. In the 1994 corrective action program review, the effects of the modified seepage recovery efforts in Zone 3 shall be evaluated. [Applicable Amendment: 2, 4, 7, 11, 19, 21]

If you have any questions or if you have need of more information, please contact me.

Sincerely,


Larry J. Bush
Manager & Sr. Geologist

cc: File
Ken Hooks-NRC Project Manager
NRC REGION IV
Greg Lyssy
Steve Cline
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LB/ljb