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GROUND WATER

JUN 11 2019

BUREAU

Date: JUN 11 2019
Refer To: N3B-19-0168

Mr. Steve Pullen
Ground Water Quality Bureau
New Mexico Environment Department
1190 S. St. Francis Drive
Santa Fe, NM 87505

Subject: Land Application of Treated Groundwater in 2019 under Discharge Permit 1793, Work Plan #5

Dear Mr. Pullen:

On April 18, 2019, the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB); the U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA); and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) met to discuss land application of treated groundwater in relation to Discharge Permit 1793 (DP-1793) and recent amendments to groundwater- and surface-water-protection regulations [20.6.2 New Mexico Administrative Code (NMAC)] that took effect on December 21, 2018.

In accordance with the “Multiple Activities Work Plan for the Treatment and Land Application of Groundwater from Mortandad and Sandia Canyons, DP-1793 Work Plan #5” (Los Alamos National Laboratory document EPC-DO: 17-050) grab samples will be collected from the sample port downstream of the last ion-exchange treatment vessel at least once a week when treated groundwater is being land applied. These treated water grab samples will be analyzed at an off-site, independent National Environmental Laboratory Accreditation Program–accredited analytical laboratory for chromium, nitrate+nitrite-N, and perchlorate. In addition, operational grab samples will be collected twice a week when treated groundwater is being land applied. These operational grab samples will be measured for chromium and nitrate-N using the HACH System or equivalent.

In addition, NMED specified in “Approval with Modification of Work Plan #5 for Treatment and Land Application of Groundwater TA-05, Los Alamos National Laboratory, Discharge Permit 1793” dated June 15, 2017, that the treated waters being staged in the lagoons must be analyzed for chromium and nitrate prior to land application. A representative sample of the lagoon water will be analyzed using the HACH System for chromium and nitrate.

Currently, DOE/N3B have suspended the land application of treated groundwater under DP-1793 because of the new 20.6.2.3103 NMAC and 20.6.2.7.T(2) NMAC toxic pollutants standards. DOE/N3B are implementing new sampling protocols and obtaining off-site analytical laboratory

services to analyze for the new 20.6.2 NMAC contaminants. It is anticipated that off-site analytical services will be available in the summer of 2019.

Once analytical services are available, DOE/N3B propose taking a representative sample from a defined body of water to be land applied (e.g., lagoon, water storage tank) and analyzing the sample for all new 20.6.2 NMAC contaminants. Treated groundwater that is less than 90% of the numeric standards of 20.6.2.3103 NMAC and less than 90% of the numeric value established for tap water in "NMED Risk Assessment Guidance for Site Investigations and Remediation Table A-1" for 20.6.2.7.T(2) NMAC toxic pollutants could then be land applied in accordance with the requirements of Work Plan #5.

DOE/N3B are requesting NMED GWQB concurrence with the proposed sampling methodology before resuming land application of treated groundwater under DP-1793.

If you have questions, please contact Christian Maupin at (505) 695-4281 (christian.maupin@em-la.doe.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@em.doe.gov).

Sincerely,



Frazer Lockhart
Program Manager
Regulatory and Stakeholder Interface
N3B-Los Alamos

Sincerely,



David S. Rhodes, Director
Office of Quality and Regulatory Compliance
Environmental Management
Los Alamos Field Office

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