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Date: JUL 2 8 2016 Symbol: EPC-DO-16-182

LA-UR: 16-24550

Locates Action No.: N/A

Ms. Michelle Hunter, Chief Ground Water Quality Bureau New Mexico Environment Department Harold Runnels Building, Room N2261 1190 St. Francis Drive P.O. Box 26110 Santa Fe, NM 87502

Dear Ms. Hunter:

Subject:

Discharge Plan DP-1132 Quarterly Report, Second Quarter 2016, TA-50 Radioactive

Liquid Waste Treatment Facility

This letter from the U.S. Department of Energy and Los Alamos National Security, LLC (DOE/LANS) is the second quarter 2016 Discharge Plan DP-1132 report for the Technical Area (TA)-50 Radioactive Liquid Waste Treatment Facility (RLWTF). Since the first quarter of 1999, DOE/LANS have provided the New Mexico Environment Department (NMED) with voluntary quarterly reports containing analytical results from effluent and groundwater monitoring.

During the second quarter of 2016, no effluent was discharged to either National Pollutant Discharge Elimination System (NPDES) Outfall 051 or to the solar evaporative tank system (SET) at TA-52; all effluent was evaporated on-site at the mechanical evaporator system (MES).

Quarterly Monitoring Results, Mortandad Canyon Alluvial Groundwater Wells

Table 1.0 presents the analytical results from sampling conducted at Mortandad Canyon alluvial wells MCO-6 and MCO-7 during the second quarter of 2016. No sample was collected from alluvial well MCO-4B because there was insufficient water in the well for sampling. No sample was collected from alluvial well MCO-3 because the well was damaged beyond repair during a flood event in September 2013. Samples from wells MCO-6 and MCO-7 were submitted to GEL Laboratories LLC for analysis. Analytical results from the sampling of intermediate and regional aquifer wells in Mortandad Canyon can be accessed online at the Intellus New Mexico environmental monitoring data web site (http://www.intellusnmdata.com).



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TA-50 RLWTF Effluent Monitoring Results

No final weekly composite (FWC) samples were collected during the second quarter of 2016 because no effluent was discharged to Mortandad Canyon.

No final monthly composite (FMC) samples were collected during the second quarter of 2016 because no effluent was discharged to Mortandad Canyon.

Please contact Robert S. Beers by telephone at (505) 667-7969 or by email at <u>bbeers@lanl.gov</u> if you have questions regarding this report.

Sincerely,

Anthony R. Grieggs, Group Leader

Environmental Compliance Programs Group

Los Alamos National Security, LLC

Sincerely,

Karen E. Armijo

Permitting and Compliance Manager

National Security Missions

NNSA/Los Alamos Field Office

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GROUND WATER

JUL 29 2016

BUREAU

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Discharge Plan DP-1132 Quarterly Report 2nd Quarter, 2016

Table 1.0. Mortandad Canyon Alluvial Well Sampling, 2nd Quarter 2016.

Sampling Location	Sample Field Prep (F/UF) ¹	Sample Date	Perchlorate (µg/L)	NO ₃ +NO ₂ -N (mg/L)	TKN (mg/L)	NH3-N (mg/L)	TDS (mg/L)	F (mg/L)
МСО-3		Damaged ⁴	Damaged ⁴	Damaged ⁴	Damaged ⁴	Damaged ⁴	Damaged ⁴	Damaged ⁴
MCO-4B	F	Dry ⁵	Dry ⁵	Dry ⁵	Dry ⁵	Dry ⁵	Dry ⁵	Dry ⁵
MCO-6	F	5/13/2016	3.9	0.59	0.45	0.06	281	1.0
MCO-7	F	5/13/2016	6.7	0.64	0.05	0.06	323	0.94
NM WQCC 3103 Groundwater Standards			NA ²	10 mg/L ³	NA ²	NA ²	1000 mg/L	1.6 mg/L

Notes:

¹F means the sample was filtered. UF means the sampled was not filtered.

²NA means that there is no NM WQCC 3103 standard for this analyte.

³The NM WQCC 3103 Groundwater Standard is for NO₃-N.

⁴Damaged means that the well was damaged beyond repair during a flood event in Mortandad Canyon in September 2013.

⁵Dry means there was not sufficient water for sampling.

J flag indicates an estimated value.