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ENTERED

NEW MEXICO
ENVIRONMENT DEPARTMENT

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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

October 16, 2014

Peter Maggiore, Assistant Manager
Environmental Projects Office
Los Alamos Field Office, DOE
3747 West Jemez Rd, MS A316
Los Alamos, NM 87544

Michael Brandt, Associate Director
Environment, Safety, Health
Los Alamos National Laboratory
P.O. Box 1663, MS K491
Los Alamos, NM 87545

RE: SWMU ASSESSMENT REPORT
DIESEL FUEL SPILL FROM AST 55-560
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-MISC

Dear Messrs. Maggiore and Brandt:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (collectively, the Permittees) document entitled *Investigation Report for Addendum to the Work Plan for the Removal of Soils Contaminated with Diesel Fuel Released from RLUOB Aboveground Storage Tank 55-560 Additional Sampling and Analysis Plan (IR)* dated June 16, 2014 and referenced by ENV-DO-14-0127/LAUR 14-24294.

A release of diesel fuel was discovered in January 2013 in the vicinity of aboveground storage tank (AST) 55-560. Diesel fuel likely began leaking from the skid pump associated with AST 55-560 located south of the Radiological Laboratory Utility Office Building (RULOB) (building 55-400) in November 2012. An emergency response was conducted and approximately 5 yd^3 of diesel contaminated soil was removed. The Permittees removed an additional 100 yd^3 of soil from the vicinity of AST 55-560 and subsequently applied a commercial bioremediation product (Micro-Blaze®) to the floor of the excavation for a period of two weeks in July-August 2013.

Three verification samples, collected after the application of Micro-Blaze®, indicated that total petroleum hydrocarbon diesel range organics (TPH-DRO) concentrations decreased based on concentrations detected in two samples collected from the floor. However, the concentrations increased based on the sample collected from the sidewall of the excavation. Although the concentration of TPH-DRO decreased in some locations after the application of Micro-Blaze®, the detected concentrations were significantly higher than the NMED's industrial (1800 mg/kg) and residential (1000 mg/kg) screening guidelines, i.e., at 2,920 mg/kg (7.75 feet below ground surface (bgs)), 65,200 mg/kg (6 feet bgs), and 16, 400 mg/kg (7.75 feet bgs), respectively.

To define the horizontal and vertical extent of contamination, five boreholes were drilled to depths of 54 feet bgs in April 2014. In borehole 1, TPH-DRO was detected at 6500 mg/kg in the sample collected from 8-9 feet bgs, which exceeds the NMED's industrial and residential screening guidelines for TPH-DRO. TPH-DRO was detected in samples collected from boreholes 2-5 at concentrations less than the applicable screening levels. The nature and extent of contamination is defined at the site.

The Permittees have requested 'no further action' determination from NMED's Petroleum Storage Tank Bureau. The Permittees intend to leave residual contamination in place which is above NMED's soil screening cleanup levels (SSLs) specified at Section VIII.B.1 of the Consent Order. The Permittees must submit a solid waste management unit (SWMU) assessment report (SAR) in accordance with Section V.C of the Consent Order that addresses the presence of residual contamination at levels greater than the NMED SSLs by **December 16, 2014.**

Should you have any questions, please contact Neelam Dhawan of my staff at (505) 476-6042.

Sincerely,

for

John E. Kieling
Chief
Hazardous Waste Bureau

cc: T. Blaine, NMED EHD
D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
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File: Reading and LANL 2014 – SAR for TA-55, AST 55-560