ESHID-603671

Los Alamos National Laboratory
PO Box 1663, MS-M969
Los Alamos, NM 87545
505-667-8160

Environmental Protection and Compliance Division

Date: December 16, 2021
Symbol: EPC-DO-21-394
LA-UR: 21-31970

Rick Shean, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

Subject: 15-Day Notification of Newly Detected Constituent in Vapor Monitoring Well, Technical Area 63, Transuranic Waste Facility, Los Alamos National Laboratory EPA ID#NM0890010515

Dear Mr. Shean:

This letter provides the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) notification of detection of a new constituent in soil vapor laboratory analytical results from a vapor monitoring well at Los Alamos National Laboratory (LANL), Technical Area 63 (TA-63), Transuranic Waste Facility (TWF) operated by Triad National Security, LLC (Triad) on behalf of the U.S. Department of Energy. The LANL Hazardous Waste Facility Permit (Permit), Section 3.14.3 requires written notification within fifteen days after review of analytical data when sample results indicate "detection of a contaminant in a vapor monitoring well if that contaminant has not been previously detected in the well." The seventeenth quarterly sampling effort occurred on November 3, 2021. Sample results were received on December 3, 2021. One sample from vapor monitoring well VMW-1 (63-2009) indicates the presence of xylene[1,3-]+xylene[1,4-] at the five foot sampling port for the first time since sampling began.

Enclosure 1 provides the following permit-required information: date or dates of the sampling event; well designation, location of the well, any known issues with sample quality, and the specific category for which the data is reported under Section 3.14.3.

Soil vapor monitoring well VMW-1 is located within the TA-63 TWF unit boundary on the northern side of the TWF storage building foundations. The well is located adjacent to the utility corridor on Puye Road and east of the TA-50 Material Disposal Area C Solid Waste Management Unit 50-009. The vapor monitoring well has one sampling port at 5 feet nominal depth below the building foundation.

Permit Table 3.14.3.1, *Current Soil Gas Screening Levels for Selected VOCs at sampling ports located 5 feet below the ground surface*, includes xylenes (total), o-xylene, p-xylene, and m-xylene. Analysis of the soil vapor sample detected xylene[1,3-]+xylene[1,4-] which corresponds to m-xylene and p-xylene in the Permit Table.

Analysis of the soil vapor sample from VMW-1 indicated an estimated concentration of 10 micrograms per meter cubed (ug/m^3) for xylene[1,3-]+xylene[1,4-] which is below the analytical report detection limit of 36 ug/m^3. The Permit screening level for the corresponding constituents

are p-xylene at 9.77E+05 ug/m^3 and m-xylene at 1.01E+06 ug/m^3. The estimated concentration of 10 ug/m^3 in the soil vapor sample is well below either action level. There are no known issues with the sample quality.

It should be noted that other wells have indicated the presence of xylene[1,3-]+xylene[1,4-] in the past. These detections occurred in field blank samples and was resolved by replacing the field blank canister.

Triad proposes collection of a field duplicate from vapor monitoring well VMW-1 during the next quarterly sampling event. This will aid in the evaluation of the potential presence of xylenes. Field sampling will occur at the end of January with the report due 60 days after field work is complete. Triad will contact NMED-HWB if xylenes are present once the analytical data is validated.

The seventeenth quarterly vapor monitoring report is due to NMED-HWB no later than January 4, 2022. The information presented in this notification will be included in the full report including additional information regarding the presence of xylenes.

If you have any questions or comments concerning this notification, please contact Patrick L. Padilla, Triad, at (505) 412-0462, plpadilla@lanl.gov.

Sincerely,

JENNIFER
PAYNE (Affiliate)

Digitally signed by JENNIFER PAYNE (Affiliate)
Date: 2021.12.15 15:51:54 -07'00'

Jennifer E. Payne
Division Leader

JP:PLP

Enclosure: 1) Additional Constituent Detected in TA-63 TWF Soil Vapor Monitoring Well VMW-1

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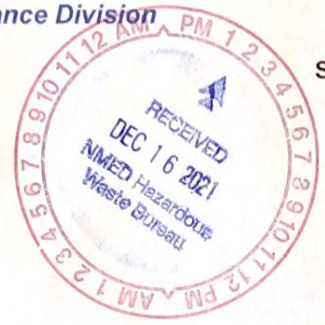

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ENCLOSURE 1

Additional Constituent Detected in TA-63 TWF Soil Vapor Monitoring Well VMW-1

EPC-DO-21-394

LA-UR-21-31970

Unclassified

Date: December 16, 2021

Additional Constituent Detected in TA-63 TWF Soil Vapor Monitoring Well VMW-1

Date of Sampling Event	November 3, 2021
Well Designation	VMW-1, 5 foot port
Location of Well	Los Alamos National Laboratory, Technical Area 63 Transuranic Waste Facility Structure Number 63-2009 Northing: 1768255.1868 Easting: 1627195.9881
Known Issues with Sample Quality	None
Reporting Data Category for LANL Hazardous Waste Facility Permit Section 3.14.3	Additional compound not previously detected in the soil vapor monitoring well

Well ID	Sample ID	Port Depth	Constituent	Listing in Permit Table	Result (ug/m^3)	EPA Data Qualifier	Report Detection Limit (ug/m^3)	Soil Gas Screening Level (ug/m^3)	Percentage of SGSL (%)
VMW-1 (63-2009)	TWF63-22-235818	5	Xylene[1,3-] +Xylene[1,4-]	p-Xylene; m-Xylene	10	J	36	9.77E+05; 1.01E+06	<0.001

EPA Data Qualifier “J” indicates the constituent is present, but is estimated.