ESHID-603719

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

Environmental Protection and Compliance Division

Date: September 7, 2022
Symbol: EPC-DO-22-243
LA-UR: LA-UR-22-29055

Mr. Rick Shean, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 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 the 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, National Nuclear Security Administration, Los Alamos Field Office. The LANL Hazardous Waste Facility Permit (Permit), Part 3, 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 twentieth quarterly sampling effort occurred on July 28, 2022. Sample results were received on August 24, 2022. One sample from vapor monitoring well VMW-3 (63-2011) indicates the presence of propanol[2-] (isopropyl alcohol) in the five-foot sampling port for the first time since vapor 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 Permit, Part 3, Section 3.14.3.

Soil vapor monitoring well VMW-3 is located within the permitted unit on the western edge of the unit, close to the utility corridor on Pajarito 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, Part 3, Table 3.14.3.1, Current Soil Gas Screening Levels for Selected VOCs at sampling ports located 5 feet below the ground surface does not include propanol[2-] (isopropyl alcohol) as a constituent of concern.

Analysis of the soil vapor sample from VMW-3 indicates an estimated concentration of 29 micrograms per meter cubed ($\mu g/m^3$) for propanol[2-], which is below the analytical report detection limit of 100 $\mu g/m^3$. There are no known issues with the sample quality.

It should be noted that analytical results from VMW-1 (63-2009), VWM-4 (63-2012), and VMW-5 (63-2013) wells this quarter and previous quarters also demonstrate the presence of propanol[2-].

Triad proposes to continue to sample and track the presence of propanol[2-] in the subsurface through continued vapor monitoring and reporting.

The twentieth quarterly vapor monitoring report is due to NMED-HWB no later than September 27, 2022. The information presented in this notification will be included in the full report.

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: 2022.09.06 16:44:55 -06'00'

Jennifer E. Payne
Division Leader
Environmental Protection and Compliance Division
Triad National Security, LLC
Los Alamos National Laboratory

JP:PLP

Enclosure: 1) 15-Day Notification of Newly Detected Constituent in Vapor Monitoring Well, Technical Area 63, Transuranic Waste Facility, Los Alamos National Laboratory EPA ID# NM0890010515

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Los Alamos
NATIONAL LABORATORY

COPY

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ENCLOSURE

15-Day Notification of Newly Detected Constituent in Vapor Monitoring Well, Technical Area 63, Transuranic Waste Facility, Los Alamos National Laboratory

EPA ID#NM0890010515

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U.S. Department of Energy,
National Nuclear Security Administration Los Alamos Field Office, and
Triad National Security, LLC

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

Table 1. Additional Constituent Detected in TA-63 Transuranic Waste Facility Soil Vapor Monitoring Well VMW-3

Date of Sampling Event	July 28, 2022
Well Designation	VMW-3 (63-2011), 5-foot port
Location of Well	Los Alamos National Laboratory, Technical Area 63 Transuranic Waste Facility Structure Number 63-2011 Northing: 1768146.4583 Easting: 1627070.4992
Know Issues with Sample Quality	None
Reporting Data Category for LANL Hazardous Waste Facility Permit Part 3, Section 3.14.3	Additional compound not previously detected in the soil vapor monitoring well.

Table 2. Soil Vapor Monitoring Well Analytical Data

Well ID	Sample ID	Port Depth (feet)	Constituent	Listing in Permit Table	Result (µg/m^3)	Data Qualifier	Report Detection Limit (µg/m^3)	Soil Gas Screening Level (µg/m^3)	Percentage of SGSL (%)
VMW-3 (53-2011)	TWF63-22-253713	5	Propanol[2-]	not applicable	29	J	100	not applicable	not applicable

EPA Data Qualifier “J” indicates the constituent is present, but estimated.
Not applicable indicates that the constituent is not listed in Permit, Part 3 Tables.