ESHID-603837

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

Environmental Protection and Compliance Division

Symbol: EPC-DO-24-145
Date: June 3, 2024
LA-UR-24-25338

Mr. JohnDavid Nance, 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

Dear Mr. Nance:

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 vapor monitoring wells 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 (EPA ID# NM0890010515) (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 previously been detected in the well." Sampling for the calendar year 2024 second quarter occurred April 30, 2024, and sample analytical results were received May 23, 2024.

A sample collected from vapor monitoring well VMW-2 (63-2010) 5-foot port indicates the presence of ethanol for the first time since vapor sampling began. Ethanol is not listed as a constituent of concern in Permit, Part 3, Tables 3.14.3.1, Current Soil Gas Screening Levels for Selected VOCs.

Soil vapor monitoring well VMW-2 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 (MDA C). The vapor monitoring well has one sampling port at 5 feet nominal depth below the building foundation.

Analysis of the soil vapor sample from VMW-2, 5-foot port indicates an estimated concentration of 40 micrograms per meter cubed ($\mu g/m^3$) for ethanol, which is below the analytical report detection limit of 80 $\mu g/m^3$. This is the first time ethanol has been detected in this well; however, results from other wells within the permitted unit have indicated the presence of ethanol in previous sampling events.

There are no known issues with the sample quality for any of the samples collected during this field campaign.

Triad will continue to sample and track the presence of ethanol in the subsurface through continued vapor monitoring and reporting.

The next monitoring report is due to NMED-HWB no later than July 1, 2024. The information presented in this notification will be included in the full report.

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.

If you have any questions or comments concerning this notification, please contact Jason Hill, Triad, at (505) 551-2218, jshill@lanl.gov.

Sincerely,

KATHERINE HIGGINS
(Affiliate)
2024.05.30 16:47:44
-06'00'

Steven L. Story
Division Leader
Environmental Protection and Compliance Division
Triad National Security, LLC
Los Alamos National Laboratory

SLS:JSH

Enclosure: *15-Day Notification of Newly Detected Constituent in Vapor Monitoring Well, Technical Area 63, Transuranic Waste Facility*

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COPY

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ENCLOSURE

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

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

Date of Sampling Event	April 30, 2024
Well Designation	VMW-2 (63-2010), 5-foot port
Location of Well	Los Alamos National Laboratory, Technical Area 63 Transuranic Waste Facility Structure Number 63-2010 Northing: 1768222.4051 Easting: 1627089.5057
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)	Percent of SGSL (%)
VMW-2 (63-2010)	TWF63-24-315611	5	Ethanol	N/A	40	J	80	N/A	N/A

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.