

## LA-UR-21-22338

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Title: Five Day Written Notification for Oral Notification on March 9, 2021,  
Los Alamos National Laboratory, EPA ID# NM0890010515

Author(s): Juarez, Catherine L.

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Environmental Regulatory Document

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**MAR 12 2021**

Date: MAR 12 2021  
Symbol: EPC-DO-21-086  
LA-UR: 21-22338

Locates Action No.:

Mr. Kevin Pierard, Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

**Subject: Five-Day Written Report for Oral Notification on March 9, 2021, Los Alamos National Laboratory,  
EPA ID# NM0890010515**

Dear Mr. Pierard:

The purpose of this letter is to provide a five-day written report pursuant to Permit Section 1.9.12 of the Los Alamos National Laboratory (LANL or the Facility) Hazardous Waste Facility Permit ("Permit"). On March 9, 2021, the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) ("Permittees") notified the New Mexico Environment Department (NMED) regarding a potential noncompliance under the Permit associated with the Plutonium Facility (PF)-4 waste generator site located at Technical Area (TA) 55. While preliminary calculations indicate that there is no imminent or potential risk or threat to human health or the environment, the Permittees provide this report as a precautionary measure to keep NMED informed of the fact-finding, extent of condition, and the planned recovery path. No workers were injured or exposed to potential hazardous constituents or radiological hazards, and there was no release of radiological, hazardous waste, or hazardous waste constituents into the building or the environment.

Attached is Enclosure 1, "Five-Day Written Report for Oral Notification on March 9, 2021". The table lists the Permit requirements in Sections 1.9.12.1 (a) through (g) and 1.9.12.2 regarding the requirements for the written report of noncompliance and the Permittees' information. Details associated with the Permittees actions regarding the potential noncompliance are presented below.

On the morning of February 26, 2021, at TA-55, within PF-4, at a generator site located within a glovebox in the building, workers packed a transuranic waste drum for disposal. In accordance with Waste Isolation Pilot Plant (WIPP) waste characterization requirements, workers performed visual examination while packing the waste drum. Two high efficiency particulate air (HEPA) filters were placed into the drum. Next, a metal waste item was put into the drum and tore the bag containing the HEPA filters. When the metal item made contact with the HEPA filters, workers observed sparks coming from the drum. Workers pulled the fire alarm, then immediately left the area and notified LANL Emergency Response. Following immediate response and clearing of the scene by the Los Alamos Fire Department, the initial inspection revealed that there was no release of waste or radiological contamination outside of the glovebox. Visual observations showed no damage to the drum-out bag or gloves.





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EPA ID# NM0890010515**

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Attached is Enclosure 1, "Five-Day Written Report for Oral Notification on March 9, 2021". The table lists the Permit requirements in Sections 1.9.12.1 (a) through (g) and 1.9.12.2 regarding the requirements for the written report of noncompliance and the Permittees' information. Details associated with the Permittees actions regarding the potential noncompliance are presented below.

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On March 1, 2021, a fact-finding and a preliminary investigation commenced to determine the cause of the reaction. The investigation is currently on-going; however, it is believed that the HEPA filters contained fragments from titanium welding that had been conducted in the glovebox under inert conditions. When the bag tore during drum packing, air entered the bag and oxidized the metal powders on the HEPA filters, which caused the sparking.

On March 4, 2021, the Permittees notified WIPP that there may be a potential noncompliance with the WIPP waste acceptance criteria.

As the Permittees continue the investigation, the current conditions are as follows:

- The container involved in the February 26, 2021 event is safely connected to the glovebox, and operations in the room have been paused pending a recovery plan.
- An extent of condition (EOC) review has identified potential containers associated with this waste stream with similar characteristics at both LANL and WIPP. Specifically, the Permittees identified four (4) containers (LA00000073611, LA00000073668, LA00000074392, LA00000074720) located at LANL.
  - An additional two (2) containers (LA00000073445, LA00000073609) are located at the WIPP facility.
- The Permittees' preliminary technical and engineering calculations demonstrate that these drums are safe and do not pose an imminent or potential risk to human health or the environment. These calculations show that the drums do not have sufficient titanium or tantalum particles to cause a temperature or pressure excursion that could breach a drum.

As the investigation continues, the Permittees will make every effort to inform NMED of its progress and provide new information in future communications. We look forward to meeting with you as needed to discuss this notification and answer any further questions you may have. Please feel free to contact Karen E. Armijo, NNSA, at (505) 221-3664, or Patrick L. Padilla, Triad, at (505) 412-0462.

Sincerely,

JENNIFER  
PAYNE (Affiliate)  
Digitally signed by JENNIFER  
PAYNE (Affiliate)  
Date: 2021.03.12 11:26:13  
-07'00'

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

JEP/KEA/PLP

Sincerely,

Karen E.  
Armijo  
Digitally signed by Karen  
E. Armijo  
Date: 2021.03.12  
11:47:33 -07'00'

Karen E. Armijo  
Permitting and Compliance Program Manager  
National Nuclear Security Administration  
Los Alamos Field Office  
U.S. Department of Energy

Enclosures (s): Five-Day Written Report for Oral Notification on March 9, 2021

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**Document:** Five-Day Written Report for Oral  
Notification on March 9, 2021

**Date:** March 2021

## CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**JENNIFER  
PAYNE (Affiliate)**

Digitally signed by JENNIFER  
PAYNE (Affiliate)  
Date: 2021.03.12 11:26:42  
-07'00'

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

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Date Signed

**Karen E. Armijo**

Digitally signed by Karen E.  
Armijo  
Date: 2021.03.12 11:48:12  
-07'00'

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**Karen E. Armijo**  
Permitting and Compliance Program Manager  
National Nuclear Security Administration  
Los Alamos Field Office  
U.S. Department of Energy

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Date Signed

# ENCLOSURE 1

Five-Day Written Report for Oral Notification on March 9, 2021

EPC-DO -21-086

LA-UR-21-22338

Date:           MAR 12 2021



Five-Day Written Report for Oral Notification on March 9, 2021

Permit Section	Permit Language	Permittees' DOE/Triad Response
1.9.12(1)(a)	Name, address, and telephone number of owner and operator	Los Alamos National Laboratory Department of Energy, National Nuclear Security Administration, and Triad National Security, LLC P.O. Box 1663 MS A316 Los Alamos, NM 87545 505-665-7314 (USDOE) 505-667-4218 (Triad)
1.9.12(1)(b)	Name, address, and telephone number of the Facility	Same as above
1.9.12(1)(c)	Date, time, and type of incident	February 26, 2021, 11:10 a.m., drum packing
1.9.12(1)(d)	Name and quantity of material involved	HEPA filter, metal particles from welding.
1.9.12(1)(e)	The extent of injuries, if any	No injuries
1.9.12(1)(f)	An assessment of actual or potential hazards to the environment and human health outside the Facility, where this is applicable	No actual or potential hazards to human health or the environment outside the Facility
1.9.12(1)(g)	The estimated quantity and disposition of recovered material that resulted from the incident	Not Applicable
1.9.12(2)	Information concerning the release of any hazardous waste or hazardous waste constituents which may endanger public drinking water supplies	Not Applicable
1.9.12(3)	Any information of a release or discharge of hazardous waste constituents, or of a fire or explosion at a permitted unit, which may threaten the environment or human health inside or outside the permitted unit	Radiological data confirmed that the drum packing did not result in a release or discharge of radiological constituents. Visual examination confirmed no release or discharge of hazardous waste, or hazardous waste constituents occurred. The drum packing did not result in a fire or explosion at a permitted unit that may have threatened human health or the environment inside or outside the unit or Facility.
1.9.12.2(1)	The period of noncompliance or incident including exact dates and times, and, if the noncompliance or incident has not been corrected, the anticipated time it is expected to be corrected	The Permittees are investigating potential non-compliances, including exact dates and times and will report to NMED as soon as information becomes available. Initial investigations have confirmed that four (4) drums, located at LANL, may have similar contents. Preliminary technical reviews have concluded that there is no potential for these drums to breach or to present a risk to human health of the environment.
1.9.12.2(2)	Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, incident, or imminent hazard	Appropriate steps will be planned and taken to reduce, eliminate, and prevent recurrence of the incident, as the investigation continues. Compensatory measures included evacuating the area, making appropriate notifications, clearing of the scene by the Los Alamos Fire Department, and confirming that there was no release of hazardous waste or radiological contamination outside of the glovebox.