



Environmental Protection & Compliance Division Los Alamos National Laboratory PO Box 1663, K491 Los Alamos, New Mexico 87545 (505) 667-2211 Environmental Management Los Alamos Field Office 1900 Diamond Drive, M984 Los Alamos, New Mexico, 87544 (505) 665-5820/Fax (505) 665-5903

Date: OCT 2 4 2017

Symbol:

EPC-DO: 17-437

LA-UR:

17-29388

Locates Action No.:

N/A

Mr. John E. Kieling, Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87505

SUBJECT: Notification of Anticipated Noncompliance with the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit, EPA ID No. NM890010515

Dear Mr. Kieling:

The purpose of this letter is to notify the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) of an anticipated noncompliance as required by the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (Permit). Permit Section 1.9.11 states that the Permittees shall give advance written notice to the Department of any planned changes to any permitted unit at the Facility or activity which may result in noncompliance with Permit requirements (see 40 CFR 270.30(l)(2)).

The Permittees have 27 containers of unremediated nitrate salt waste located within permitted storage at Technical Area (TA) 54, Area G. The waste within these containers has been assigned a U.S. Environmental Protection Agency (EPA) Hazardous Waste Number for ignitability (D001). Therefore, Permit Section 2.8.1 is applicable to management of these waste containers. Permit Section 2.8.1(4) requires the use of "non-sparking tools when managing hazardous waste containers that contain ignitable or reactive wastes."

Unremediated nitrate salt waste must be transported to the treatment/storage unit at the TA-50, Building 69, Waste Characterization, Reduction, and Repackaging Facility (WCRRF) for treatment prior to shipment for off-site disposal. At this time, unremediated nitrate salt is stored within 55-gallon waste containers that have been overpacked into 85-gallon containers. Prior to shipment, the waste within the 55-gallon container must be repackaged into 55-gallon containers that meet the requirements for shipment to the WCRRF. The 85-gallon overpack containers could be shipped to the WCRRF, however, the glovebox where stabilization treatment occurs at the WCRRF is not equipped to accept an 85-gallon container; only



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a 55-gallon container can be ported to the glovebox containment. Because of the potential degradation of the original 55-gallon container, it was determined that the High Density Polyethylene (HDPE) liners within each of the original 55-gallon containers that hold the unremediated nitrate salt waste, should be pulled from the original 55-gallon container and repackaged into a new and compliant 55-gallon waste container.

To the extent possible, opening of the 85-gallon overpack containers and the 55-gallon waste containers will be conducted by use of non-sparking tools. These tools will be made of a combination of aluminum, bronze, copper and/or beryllium. However, because the degradation of the original 55-gallon container is likely, the HDPE liner will be pulled upward out of the overpack and the original 55-gallon container. It is necessary to cut away portions of the 85-gallon and the original 55-gallon containers. This is anticipated to require the use of several cutting tools that are able to perform the necessary tasks in a non-sparking capacity even if they are not considered "non-sparking tools" as required by Permit Section 2.8.1(4). The process for cutting the containers has been evaluated to ensure that the tools can be operated in a nonsparking capacity. Documentation of the evaluation has been included as Enclosure 1.

This letter serves as a notification of an anticipated noncompliance associated with Permit Section 2.8.1(4). As it applies, tracking of this noncompliance will be included in the fiscal year 2018 reporting of other noncompliance as required by Permit Section 1.9.14. Other containers at the facility that contain waste exhibiting ignitibility (D001) and reactive (D003) are not anticipated to be opened or closed using potentially spark producing tools. If you have comments/questions or would like to meet regarding this submittal, please contact Mark P. Haagenstad, LANS, at (505) 665-2014 or David S. Rhodes, Environmental Management Los Alamos Field Office, at (505) 665-5325.

Sincerely,

John C. Bretzke

Division Leader

Sincerely,

David S. Rhodes

Director, Office of Quality & Regulatory Compliance

JCB/DSR/MPH: am

Enclosure(s) 1): Memorandum: Evaluation of Sparking Tools

Copy: Laurie King, USEPA/Region 6, Dallas, TX (E-File) Butch Tongate, NMED, Santa Fe, NM, (E-File) J. C. Borrego, NMED, Santa Fe, NM, (E-File)

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Document: Date: Anticipated Noncompliance UNS

October 2017

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with 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.

John C. Bretzke

Division Leader

Environmental Protection and Compliance Programs

Los Alamos National Laboratory

Date Signed

Arturo Q. Duran

Permitting Manager

Environmental Management

Los Alamos Field Office

U.S. Department of Energy

Date Signed

LA-UR-17-29388

EPC-DO: 17-437

ENCLOSURE 1

Memorandum: Evaluation of Sparking Tools

EPC-DO: 17-437

LA-UR-17-29388

Date: _____



EWMO-DO
Environmental Waste Management
Operations - Division Office

To: Wayne. P. Hohs, WD-DO, MS J910

Thru: Julie. Minton-Hughes, ES-EWMO, N

MS J910

From: Greg Carey, ES-EWMO, MS J565 20

Phone: 505-667-1399 Symbol: ADEM-17-0277 Date: October 4, 2017

Subject: Evaluation of Sparking Tools

At 0730 on Tuesday, October 3, 2017, I witnessed a demonstration of several cutting tools being used on a steel drum to determine each tools ability to perform in a non-sparking capacity. Three tools were evaluated to the same standards:

- 1. Whether any visible sparking was witnessed
- 2. Discernable local temperature increase on subject drum
- 3. Ease of use for operator



Figure 1: Snipping Tool



Figure 2: Snipping Tool



Figure 3: Snipping Tool

All three tools performed as desired. The shears (Figure 2) will be used to "start" a drum, giving the operator access to a lower portion of the drum with another tool. During the shear demonstration, there was no visible sparking, and no recordable temperature increase. The shears are slow while in operation, which is likely the reason for no sparks or increase in temperature.



Once access is gained below the lip of the drum, either the snipping tool (Figure 1) or nibbler (Figure 3) can be used. During the demonstration, both tools had their advantages. The snipping tool creates on strip of waste (easier for controlling cleanup) and cuts at a faster rate. There were no sparks witnessed, and there was only an average 11°F increase in temperature while measuring the waste ribbon. It was tested three times. The nibbler is easier for the operator to change direction. Its cutting bit rotates at a high rate of speed, and the cutting waste is small shards. These could be harder to control for cleanup when compared to the snipping tools ribbon. There was no sparks visible during the demonstration with the nibbler, and the average local temperature increase was 15°F, as expected due to more friction during cutting.

The arcing inside the tool housing when the brushes make contact with the armatures is normal during operation, and is exempt from RCRA restrictions concerning sparking tools. Based on the above field operations, all three tools are viable options and are acceptable in a non-sparking capacity, per the RCRA permit.

GC:JMH:sc

cc:

- D. Funk, ADEM, difalanl.gov
- S. Griego, EWDO-DO, sqg(a lanl.gov
- D. Solms, EWMO-DO, solmsda@lanl.gov
- B. Stokes, DESHS-EWMS, rstokes@lanl.gov
- L. Vigil-Holterman, EPC-CP, <u>luciana@lanl.gov</u> epccat@lanl.gov