



ESHID-603705

# Technical Area 16-399 Burn Tray Closure Plan Class 2 Amendment Public Meeting

Environmental Protection & Compliance-Waste Management Programs

July 12, 2022

LA-UR-22-26612



Managed by Triad National Security, LLC, for the U.S. Department of Energy's NNSA.

7/13/2022

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# Agenda

- Goals and Ground Rules
- Introduction
- Unit Description
- Closure Plan History
- Closure Activities
- Closure Certification Report
- Class 2 Closure Plan Amendment
- Public Comment Procedure
- Questions

TA-16-399 Burn Tray  
prior to 2019



# Goals and Ground Rules

- Goals: 1) present proposed changes to the TA-16-399 Burn Tray Closure Plan  
2) show the public how to provide comment regarding the proposed changes  
3) answer questions and listen to comments from the audience
- Ground Rules:
  - Hold questions until the time designated by the speaker or post in chat
  - Honor the process by being respectful and courteous
  - Identify yourself before speaking
  - Please keep to the subject of this meeting
  - Respect the speaking party and allow them to finish their statement prior to responding
  - Yield the floor if requested

**Karen Armijo**  
Department of Energy (DOE),  
National Nuclear Security Administration (NNSA),  
Los Alamos Field Office

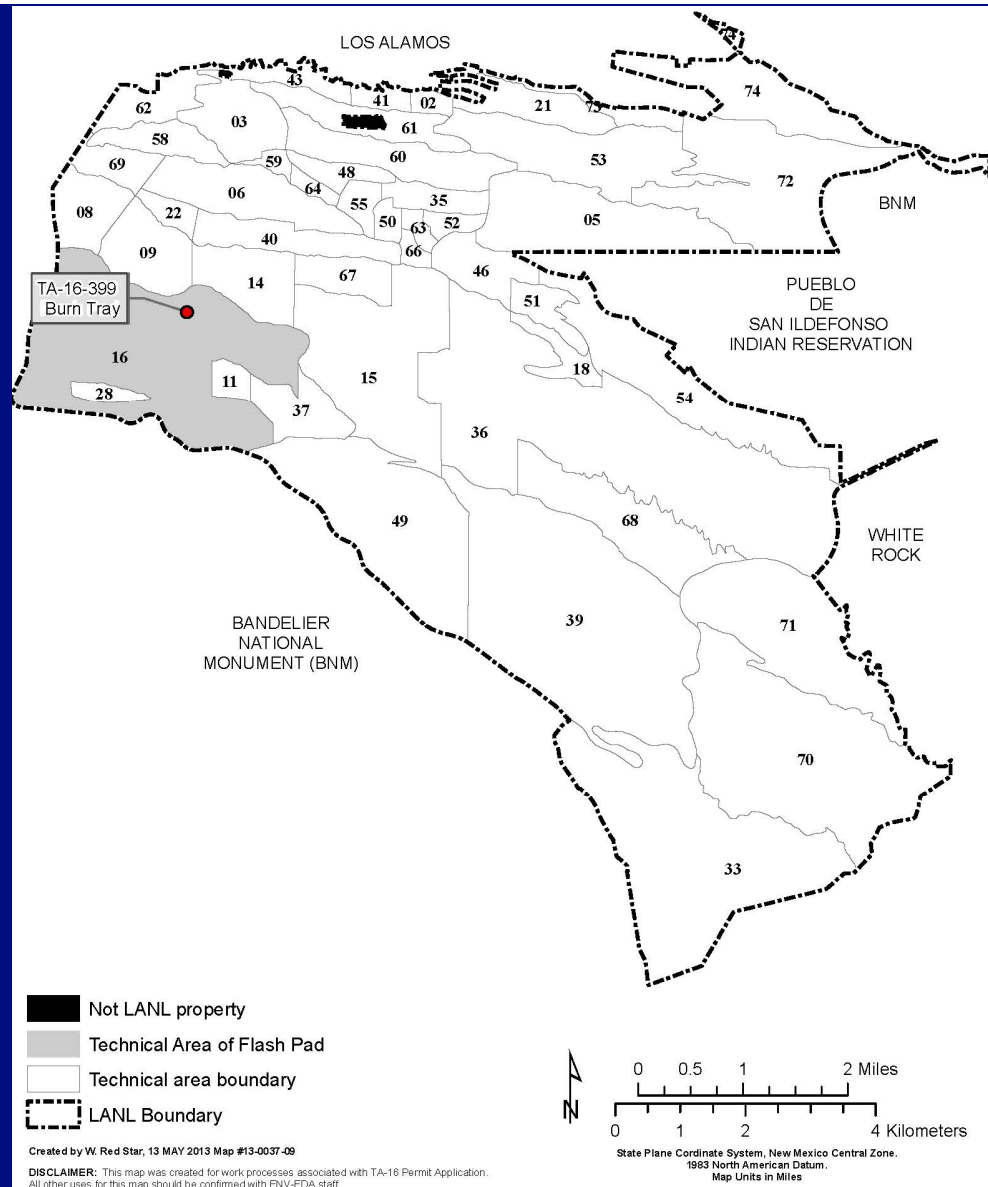


# Los Alamos National Laboratory (LANL)

- Established in 1943 to support the Manhattan Project
- LANL is an NNSA site, oversight of NNSA mission is performed by the NNSA Los Alamos Field Office (NA-LA)
  - Mission: To strengthen United States' security through the military application of nuclear energy and by reducing the global threat from terrorism and weapons of mass destruction
- Operated by Contractors for the Government since 1943
  - Triad National Security, LLC (Triad) won the Management & Operating contract in 2018 and presently operates the site for NA-LA
  - NA-LA and Triad are two of four co-Permittees in the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permit for LANL
    - Closure of this unit is under the scope of Triad

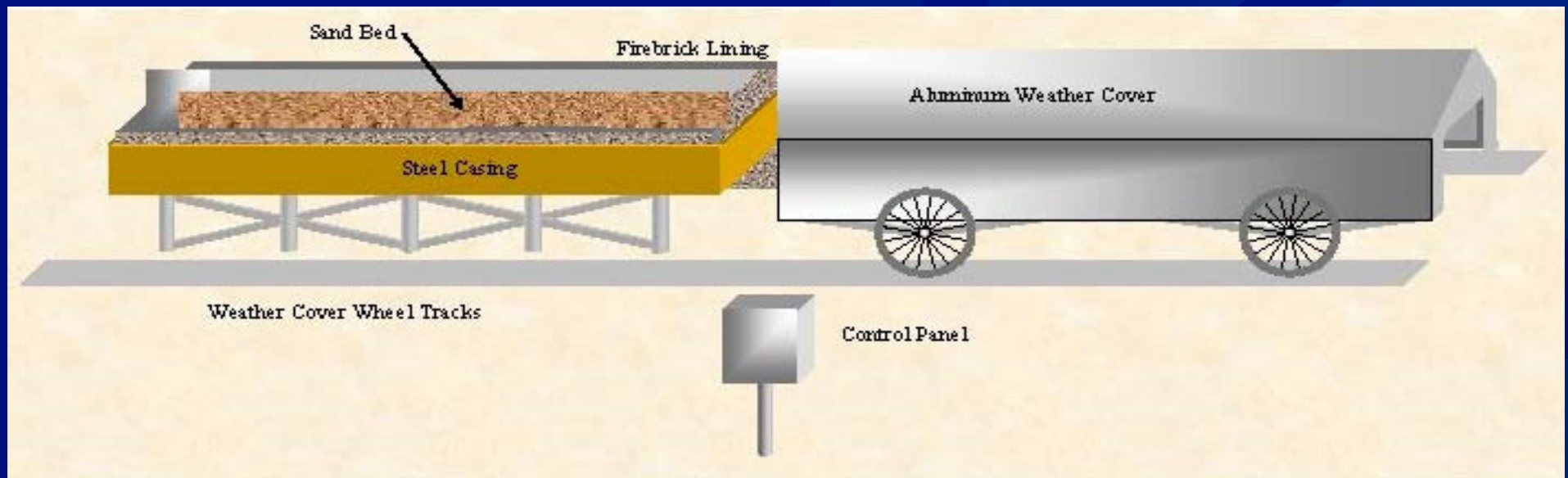
**Luciana Vigil-Holterman**  
Triad National Security, LLC  
Los Alamos National Laboratory

# Unit Description



## Unit Description (continued)

- Built in 1951
- Used to treat waste explosives until 2012
- Included in RCRA permit applications since November 1980



# Closure Plan History

- Closure Plan issued by the New Mexico Environment Department's Hazardous Waste Bureau in November 2010
  - Description of steps and schedule needed to remove hazardous waste residues to satisfy closure performance standards
    - Minimize the need for further maintenance, and
    - Control, minimize or eliminate post-closure escape of hazardous constituents
- Revisions to Closure Plan requested in May 2012
  - After comments from the Hazardous Waste Bureau, the Closure Plan was revised in December 2012
- Notification of public comment period by the Hazardous Waste Bureau in November 2013
- Final Closure Plan issued in January 2019



# Closure Activities

- April 2019
  - Removed electric box, burn tray tracks, rubber matting under the tracks, burn tray cover, firebrick, and the burn tray

Pictures depicting the burn tray before removal and during disassembly





## Closure Activities (continued)

- April 2019 (continued)
  - Concrete pad was broken up in place and consolidated into a pile for characterization
  - After characterization, the concrete was disposed of as construction debris

Picture depicting breaking up of concrete pad and a picture of the staged pile and smoothed new surface





# Closure Activities (continued)

- May 2019
  - Per the closure plan, 16 soil samples (including one duplicate sample) were collected from 11 locations at and surrounding the TA-16-399 Burn Tray

Soil sample locations, sampling activities, and explosives spot test example



## Closure Activities (continued)

- Analytical laboratory quality assurance/quality control issues required additional soil sampling
- Risk assessment calculations indicated analytical results presented unacceptable levels of explosives compounds
  - Specifically, in a location under the former concrete pad
  - Based on discussions with the Hazardous Waste Bureau soil removal was deemed the appropriate path forward



## Closure Activities (continued)

- December 2019
  - Soil was excavated
  - Additional soil samples were collected from the excavated surface and at depth samples; both analyzed for explosives compounds
  - Concentrations of explosives compounds were decreased and within acceptable residential risk levels after excavation



# Closure Certification Report

- Closure Certification Report for TA-16-399 Burn Tray closure submitted in February 2020
- In November 2020 the Hazardous Waste Bureau review determined that a revised risk assessments was necessary
  - Review required inclusion of past (2009-2013) and after excavation (December 2019) analytical data into risk assessment analyses
- Response and revised human health and ecological risk assessments submitted to the Hazardous Waste Bureau in March 2021
  - Risk assessments concluded that risk levels were calculated to be within acceptable levels for clean closure

## Closure Certification Report (continued)

- The Hazardous Waste Bureau responded in May 2021 instructing the Permittees to conduct further data analysis to determine if risk was analyzed correctly
- A meeting was held with the Hazardous Waste Bureau in June 2021
  - Hazardous Waste Bureau suggested removal of soil in the area of elevated dioxin/furan concentrations in the area to decrease risk
- In June 2021, the Permittees proposed removal of additional soil and verification sampling of two locations to reduce the risk associated with dioxin/furans and barium concentrations at the site
- Hazardous Waste Bureau approved the request in August 2021

# Closure Certification Report (continued)

## Soil Removal Activities 2021

- In November and December 2021, soil removal activities and confirmation soil sampling were conducted in two locations
  - South of the unit to address dioxin/furan congeners
  - Directly below the former Burn Tray to address risk associated with barium concentrations



Southern excavation area



Excavation within fenced area  
(facing southwest)

Excavation within fenced area  
(facing northeast)





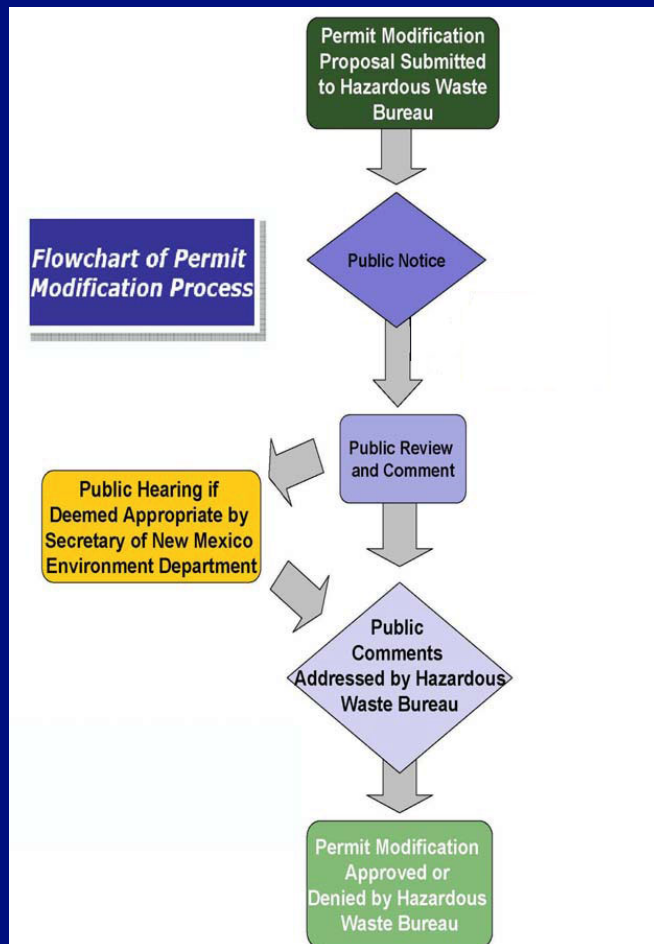
## Closure Certification Report (continued)

- In January 2022, the Permittees initiated and held a meeting with the Hazardous Waste Bureau to explain unexpected outcomes associated with soil removal activities
  - Risk associated with dioxin/furan congeners decreased
  - Risk associated with barium increased
  - Unexpected detection of explosives compounds in excavated area under the location of the former Burn Tray
- Permittees proposed that a Class 2 permit amendment was warranted under the regulations and the Hazardous Waste Bureau agreed

# Class 2 Amendment to TA-16-399 Burn Tray Closure Plan

- In June 2022, the Permittees submitted a Class 2 Amendment to the Closure Plan for the TA-16-399 Burn Tray
  - Revisions to the Closure Plan include proposal to removal additional soil from the location of the former Burn Tray
  - Soil removal will be concentrated on the mound of soil that was likely used as fill when the Burn Tray was installed in 1951
    - Information available indicates the source of elevated soil contaminant concentration
  - Confirmation soil sample locations will be analyzed for all constituents of concern
    - Volatile organic compounds are not a constituent of concern
  - Step out soil sampling locations will be selected based on depth and volume of soil removal and overall site knowledge

# Public Comment Procedure



- Review permit modification request and submit comments to Hazardous Waste Bureau before the end of the public review and comment period (June 9, 2022 to August 8, 2022)
- Hazardous Waste Bureau reviews and responds to public comments regarding the permit modification request
- Hazardous Waste Bureau issues final decision

# How to make comments

- Submit written or email comments:

Neelam Dhawan, Program Manager  
New Mexico Environment Department  
Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505

Email: [neelam.dhawan@state.nm.us](mailto:neelam.dhawan@state.nm.us)

Public comment portal: <https://nmed.commentinput.com/?id=rtKe4on>

- Comments must be made in writing or via e-mail and include the commenter's name and address

# Questions?