

NA--LASO-LANL-WASTEMGT-2014-0004

NOTIFICATION

## Occurrence Report After 2003 Redesign

Waste Management

(Name of Facility)

Nuclear Waste Operations/Disposal

(Facility Function)

Los Alamos National Laboratory

Los Alamos National Laboratory

(Site)

(Contractor)

**Name:** Steven M. Henry**Title:** EWMO Facility Operations Director**Telephone No.:** (505) 606-2394

(Facility Manager/Designee)

**Name:** TANNER, KIMBERLI K**Title:** OCCURRENCE INVESTIGATOR**Telephone No.:** (505) 665-8197

(Originator/Transmitter)

**Name:** Kimberli Tanner**Date:** 05/20/2014

(Authorized Classifier (AC))

**1. Occurrence Report Number:** NA--LASO-LANL-WASTEMGT-2014-0004

PISA: TRU Waste Drums Containing Treated Nitrate Salts May Challenge the Safety Analysis

**2. Report Type and Date:** NOTIFICATION

	Date	Time
<b>Notification:</b>	05/20/2014	14:50 (ETZ)
<b>Initial Update:</b>		(ETZ)
<b>Latest Update:</b>		(ETZ)
<b>Final:</b>		(ETZ)

**3. Significance Category:** 3**4. Division or Project:** EWMO Facility Operations

**5. Secretarial Office:** NA - National Nuclear Security Administration

**6. System, Bldg., or Equipment:** TRU waste drums with treated nitrate salts at TA54 AREA G

**7. UCNI?:** No

**8. Plant Area:** TA54 AREA G

**9. Date and Time Discovered:** 05/15/2014 19:30 (MTZ)

**10. Date and Time Categorized:** 05/16/2014 10:20 (MTZ)

**11. DOE HQ OC Notification:**

Date	Time	Person Notified	Organization
NA	NA	NA	NA

**12. Other Notifications:**

Date	Time	Person Notified	Organization
05/15/2014	19:30 (MTZ)	Darlene Rodriguez	NNSA

**13. Subject or Title of Occurrence:**

PISA: TRU Waste Drums Containing Treated Nitrate Salts May Challenge the Safety Analysis

**14. Reporting Criteria:**

3B(2) - Declaration of a potential inadequacy of the documented safety analysis (a potential positive USQ), per 10 CFR Section 830.203(g).

[Note: When a potential inadequacy of a documented safety analysis is found, it would be initially reported under Criterion 3B(2). If further analysis results in a positive USQ determination, then the occurrence report should be updated to recategorize it under Criterion 3B(1). If the analysis results in a negative USQ determination, the occurrence report should be updated to recategorize it under Criterion 3B(3).]

**15. Description of Occurrence:**

On May 16, 2014, at 1020, at Los Alamos National Laboratory (LANL), the Environment and Waste Management Operations (EWMO) Facility Operations Director (FOD) declared a Potentially Inadequate Safety Analysis (PISA) concerning the increased likelihood of previously analyzed accident scenarios for Transuranic (TRU) waste drums containing treated nitrate salts, and for which adequate controls may not be in place.

The PISA declaration was based on information received by the FOD on May 15, 2014, at 1930, that a TRU waste drum shipped from LANL had breached while in storage at the Waste Isolation Pilot Plant

(WIPP) in Carlsbad, New Mexico, resulting in partial release of its contents on February 14, 2014 (reference OPRS report number EM-CBFO--NWP-WIPP-2014-0006). The mechanism of the breach is unknown and the cause of the damage to the drum is still under investigation.

Upon identification of the potential PISA, the FOD immediately took appropriate actions to secure all drums containing treated nitrate salts still on-site at Technical Area 54 (TA54) Area G. On May 16, 2014, a critique was held where it was determined that a PISA condition existed and additional follow-on actions were established. The follow-on actions will be managed via the LANL Performance Feedback Improvement Tracking System (PFITS); reference PFITS record number 2014-1388.

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**16. Is Subcontractor Involved?** No

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**17. Operating Conditions of Facility at Time of Occurrence:**

Normal

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**18. Activity Category:**

03 - Normal Operations (other than Activities specifically listed in this Category)

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**19. Immediate Actions Taken and Results:**

1. Tamper Indicating Devices (TIDs) were placed on a TRU waste drum related to the suspect drum at WIPP and which is still on site at TA54 Area G, and the drum was over-packed in a standard waste box (SWB), on which additional TIDs were placed.
2. All remaining treated nitrate salt drums at TA54 Area G were over-packed into SWBs or pipe over pack containers and moved to a storage location with fire suppression coverage.
3. Continue a minimum of daily temperature monitoring on treated nitrated waste containers.
4. Conduct head space gas sampling of treated nitrated waste containers as necessary to collect data.
5. The USQ process was initiated.

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**20. ISM:**

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**21. Cause Code(s):**

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**22. Description of Cause:**

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**23. Evaluation (by Facility Manager/Designee):**

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**24. Is Further Evaluation Required?:** Yes

If YES - Before Further Operation? No

By whom? QPA-PA & EWMO Ops

By when? 06/30/2014

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**25. Corrective Actions**

(\* = Date added/revised since final report was approved.)

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**26. Lessons Learned:**

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**27. Similar Occurrence Report Numbers:**

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**28. User-defined Field #1:**

KKT

**29. User-defined Field #2:**

PFITS ID; 2014-1388

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**30. HQ Keyword(s):**

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**31. HQ Summary:**

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**32. DOE Facility Representative Input:**

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**33. DOE Program Manager Input:**