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**DEPARTMENT OF ENERGY**  
National Nuclear Security Administration  
Los Alamos Site Office  
Los Alamos, New Mexico 87544

 **ENTERED**



JAN 15 2013

Mr. Tom Skibitski, Director  
Resource Protection Division  
New Mexico Environment Department  
P.O. Box 5469  
Santa Fe, NM 87502-5469



Dear Mr. Skibitski:

**Subject: Transmittal of 3,706 TRU Campaign Fiscal Year 2013 First Quarterly Status Report**

Please find for your review the attached Los Alamos National Laboratory (LANL) 3,706 TRU Campaign Status Report and the LANL Water Protection Status Report for the first quarter of Fiscal Year 2013.

As discussed in the past, maintaining public transparency in the 3,706 Transuranic (TRU) Waste Campaign is of the utmost importance to the Department of Energy, Los Alamos Site Office. The attached quarterly status report will be highlighted from a link on the LANL website and available for the public's review by January 15, 2013.

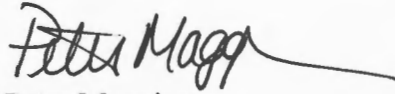
The site continues to make good progress removing waste and reducing risk. The Lab has removed a cumulative total of 1,164m<sup>3</sup> of waste as of the end of December. That equates to 60 percent of the campaign's Material at Risk (MAR) being removed from the site, with an additional 167 m<sup>3</sup> that was removed outside of the 3706 Campaign, representing a significant risk reduction.

In the spirit of transparency we want to highlight the fact that 88 m<sup>3</sup> of the 1,164 m<sup>3</sup> was administratively dispositioned during this quarter. Essentially, the TRU waste database had records for eight boxes and four drums that did not physically exist at the time the 3706 m<sup>3</sup> inventory was derived. The boxes were a subset of containers identified in 2006 that were not found within the facility but which remained in the database. This discrepancy originated during the first physical inventory of legacy waste conducted at Area G. Since that time all of the waste containers, with the exception of these eight boxes and four drums, have been reconciled. In-depth investigations during the development of the solution packages during the past year reconciled these specific containers and proved that this 88m<sup>3</sup> had been either repackaged or were containers that resulted from inscription duplications and entered into the database. The contents of these containers in their original state included dispersible/combustible material and were a conservative assertion to include them as inventory within the 3706 m<sup>3</sup> of above grade waste to be removed to reduce the risk at Los Alamos. LANL believes it is important to reconcile the inventory that was counted within the 3706 TRU campaign and therefore included the finding in the quarterly report through December 2012. While we regret this confusion, LANL wanted to be forthcoming with this information.

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We look forward to continued success of this important work for Los Alamos as well as the State of New Mexico. If you have any questions, please contact David Nickless of my staff at (505) 665-6448.

A handwritten signature in black ink, appearing to read "Peter Maggiore", with a long horizontal flourish extending to the right.

Peter Maggiore  
Assistant Manager  
Environmental Projects Office

Enclosure

cc w/enclosure:

John Kieling

Chief

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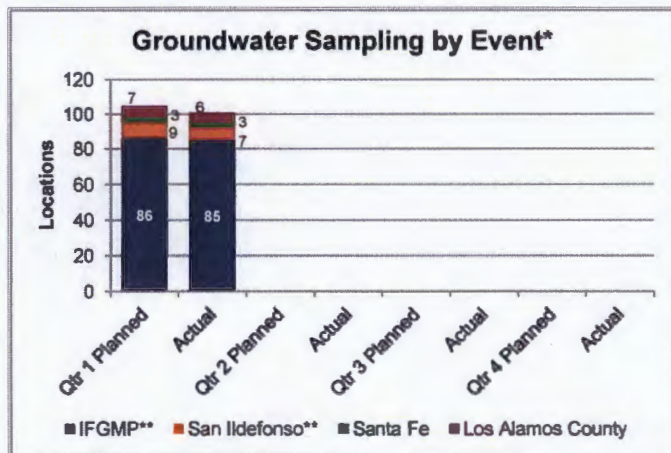


# LANL Water Protection Status Report — FY13 1st Qtr. (Oct to Dec 2012)

	1 <sup>st</sup> Qtr	2 <sup>nd</sup> Qtr	3 <sup>rd</sup> Qtr	4 <sup>th</sup> Qtr
Groundwater Protection — Continued monitoring of the Buckman Direct Diversion and Los Alamos County Water Supply Wells	☑			
Groundwater Protection — Continued implementation of the Interim Facility-Wide Groundwater Monitoring Plan (IFGMP)	☑			
Surface Water Protection — Continued protection of surface water through implementation of the Individual Stormwater Permit (IP)	☑			
Buckman Early Notification System operability at 100% per memorandum of understanding (MOU) requirements	☑			

## Groundwater Protection

### Groundwater Sampling by Event\*



\* An event is a single-screen well location, each individual well screen for multi-screen wells, spring or base-flow location.

\*\* San Ildefonso locations included in both the IFGMP and San Ildefonso MOU are identified as San Ildefonso locations for this report.

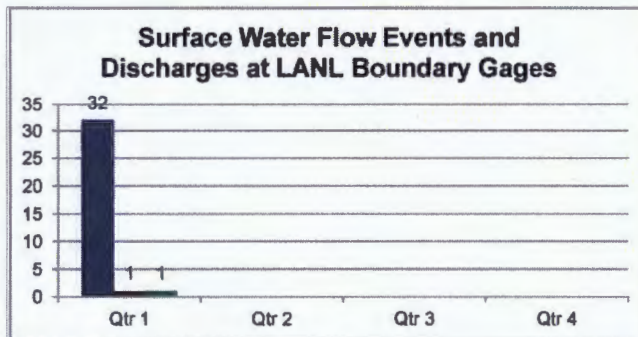
FY12 4<sup>th</sup> Quarter (July – Sept) Analytical Summary: Analysis of the 101 groundwater samples collected this quarter provided 14,261 analyte measurements of which no new exceedances were confirmed to be from a Los Alamos National Laboratory (LANL) source. (First quarter analytical results are pending.)

#### First Quarter Sampling Event Deviation Explanations:

- (1) **IFGMP:** White Rock Canyon: Spring 9B inaccessible due to poison ivy and MCOI-4 was dry.  
TA-21: LAOI-3.2 sampled this quarter (not planned) following pump failure in FY12 Q4.
- (2) **San Ildefonso:** Mortandad at Rio Grande and Sandia Spring were dry.
- (3) **City of Santa Fe:** None
- (4) **Los Alamos County:** PM-4 not sampled because it was inoperable due to a mechanical issue.

## Surface Water Protection

### Surface Water Flow Events and Discharges at LANL Boundary Gages



- Days with measured flow at any LANL gage station (>5 cubic feet per second [cfs])
- Days with flow at LANL boundary stations E050.1, E060.1, E125, E250, E265, E267, E275, and E338 (>5 cfs)
- Days with measured flow at Buckman Early Notification Station E109.9 (>5 cfs) from LANL watersheds.

#### Note:

On 10/12/2012, a sitewide storm event occurred during which E050.1 flowed at 30 cfs and E109.9 flowed at 420 cfs; thus, water most likely flowed off LANL property to the Rio Grande. However, most of the flow at E109.9 was from Guaje Canyon.



# LANL 3,706 TRU Campaign Status Report – FY13 1st Qtr. (Oct. thru Dec. 2012)

## Processing Highlights

### RANT (Shipping Facility):

- Shipped 37 shipments for a cumulative total of 267 shipments to WIPP since the beginning of the Campaign.
- Shipped 60% of the total Plutonium activity for the Campaign.
- Continued construction on the RANT Transportation Center to support FY13 shipment schedule.
- Second crane scheduled to be installed during WIPP outage in Jan 2013.

### WCRRF (High Activity Drum Line):

- During split shift operation, the repackaging line performed remediation on 93 drum equivalents (DE), for a total of 763 DE cumulative since the beginning of the Campaign.

### Building 375 (Box Line):

- Design changes to fire suppressions system have delayed completion. Facility is expected to begin radiological box processing in Feb 2013, and is expected to be processing Haz Cat III Solid Waste Boxes by April 2013.

### Building 412 (Box Line):

- During single and split shift operation, the repackaging line performed remediation on 70.3 m3, for a total of 442.8 m3 since the beginning of the Campaign.
- Conversion to drum line to take place Feb 2013.

### Dome 231 (Box Line):

- Began processing radiological boxes in Nov 2012, and planned to begin processing Haz Cat III boxes in Feb 2013.

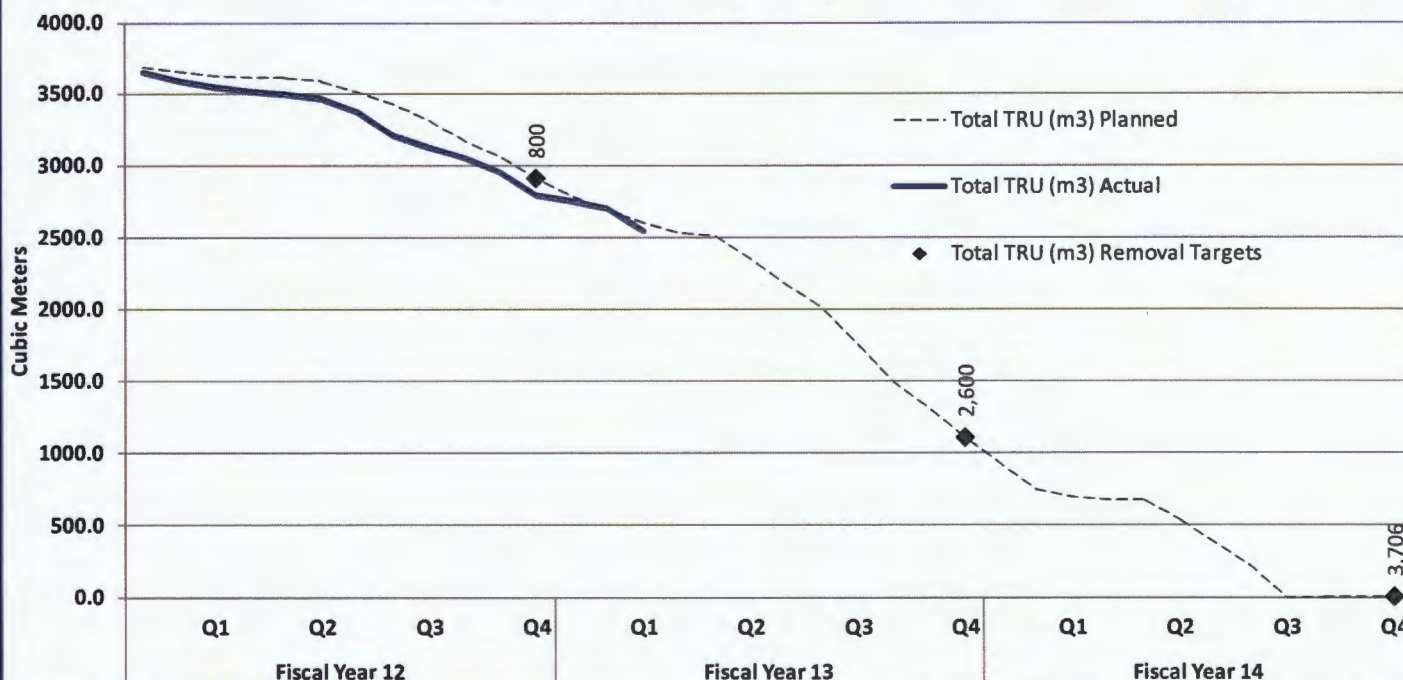
### Central Characterization Project:

- As of Dec. 31, 2012, 116 containers are approved and ready for shipment in the Waste Disposal System database, and 407 have completed all characterization, are undergoing Project Office review by CCP, and will become available for shipment.

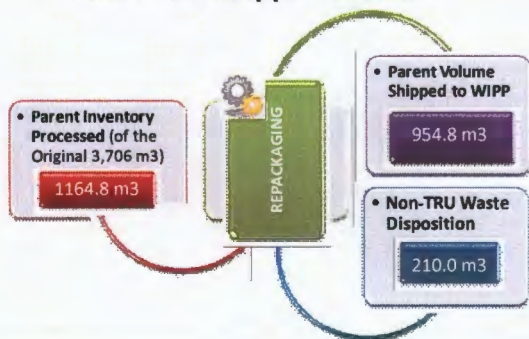
TRU Volume Removed			FY2012 thru 12/31/12			PROJECTIONS FOR NEXT QUARTER *			
SHIPMENTS * (as of 12/31/12)		2014 Goal	2012 Actual	FY2013 Q1 Actual to Date	Cumulative Actual to Date	% Complete	Q2 Forecast	Cumulative at End of Quarter	Cumulative % Complete
3,706 TRU Campaign	Volume (m3)	3706.0	920.1	244.7	1164.8	31%	250	1355.6	37%
	Drum Equivalents	17817.3	4423.3	1176.4	5599.8		1201.9	8270.9	
	Radioactivity (PE Ci)	41510.7	23075.2	1662.5	24737.7	60%	2094.6	30696.1	74%

## 3,706 LANL TRU Campaign Performance

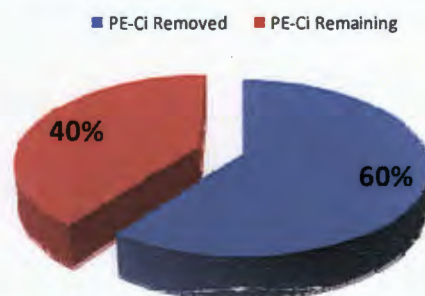
(Target = 3,706 m3; Remaining = 2,541 m3)



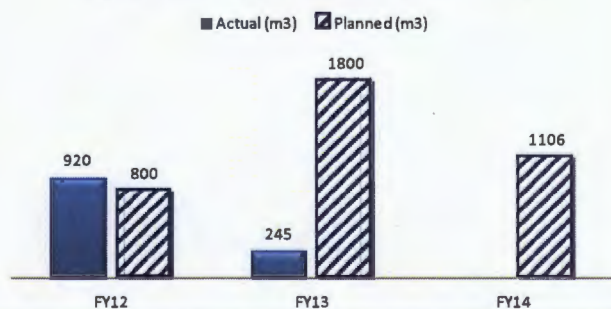
### Parent vs. Shipped Volumes



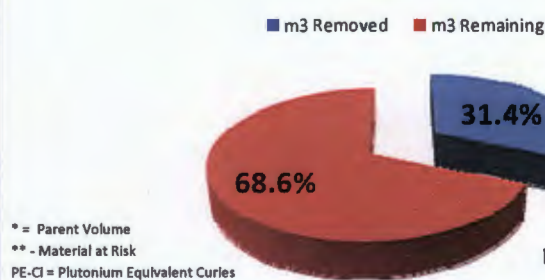
### \*\* MAR Removal - Total Campaign



### 3,706 Goal vs. Progress (Volumes)



### 3,706 TRU Campaign Cumulative Progress



\* = Parent Volume  
\*\* = Material at Risk  
PE-CI = Plutonium Equivalent Curies

LA-UR-13-20147