



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



**APR 10 2014**

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Tom Blaine, Director  
Environmental Health Division  
New Mexico Environment Department  
P.O. Box 5469  
Santa Fe, NM 87502-5469

Dear Mr. Blaine:

Subject: Transmittal of 3,706 Transuranic Campaign Fiscal Year 2014 Second Quarter Status Reports

Please find for your review the enclosed Los Alamos National Laboratory (LANL) 3,706 Transuranic (TRU) Campaign Status Report and the LANL Water Protection Status Report for the second quarter of Fiscal Year (FY) 2014.

As discussed in the past, maintaining public transparency in the 3,706 TRU Waste Campaign is of the utmost importance to the Department of Energy, Los Alamos Field Office. The enclosed quarterly status report will be highlighted from a link on the LANL website and available for the public's review by April 15, 2014.

As you know, the events at the Waste Isolation Pilot Plant (WIPP) have curtailed shipments of TRU waste to the WIPP facility. Despite this significant impediment, the Department remains committed to the Framework Agreement commitment and is continuing shipments to Waste Control Specialist in Andrews, Texas for temporary storage. As of the end of March 2014, a cumulative total of 3,175.7 m<sup>3</sup> of waste has been removed, which exceeds the interim FY14 campaign milestone of 3,171 m<sup>3</sup> by 4.7 m<sup>3</sup>. That equates to 85 percent of the campaign's Material at Risk being removed from the site, representing a significant risk reduction.

Also, it is a pleasure to share that of the 477 containers of newly generated TRU waste received into Area G in FY12 for disposal, only 11 (2 percent) remain to be shipped and of the 568 containers received into Area G in FY13, only 43 (8 percent) remain to be shipped.

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

Peter Maggiore  
Assistant Manager  
Environmental Projects Office

Enclosures

cc w/enclosures:

John Kieling

Chief

Hazardous Waste Bureau

New Mexico Environment Department

2905 Rodeo Park Drive East, Building 1

Santa Fe, NM 87505-6303

B. Diamond, NA-GC, HQ/FORS

F. Marcinowski, EM-30, HQ/FORS

A. Harris, EM-31, HQ/GTN

K. Davis Lebak, OOM, NA-LA

M. Duvall, OOM, NA-LA

T. O'Leary, BA, NA-LA

G. Rael, NSM, NA-LA

D. Rhodes, EPO, NA-LA

B. Pfaff, EPO, NA-LA

L. Bishop, EPO, NA-LA

D. Nickless, EPO, NA-LA

T. Chiri, BA, NA-LA

J. Franco, WIPP, CB

T. Morgan, WIPP, CB

J. Mousseau, ADEP, LANS, MS-K788

D. Cox, ADEP, LANS, MS-K788

K. Johns-Hughes, LTP, LANS, MS-K788

Records Center, NA-LA

Official Contract File, NA-LA

EPO-32DN-601-570472

# LANL 3,706 TRU Campaign Status Report – FY14 2nd Qtr. (Jan. thru Mar. 2014)

## Processing Highlights

### RANT (Shipping Facility):

- Completed 21 shipments this Quarter for a cumulative total of 478 shipments to WIPP since the beginning of the Campaign in October 2011.
- Shipped a cumulative total of 85% of the total Material at Risk (MAR) for the Campaign.

### WCRRF (High Activity Drum Line):

- The repackaging line has performed remediation on 1,507 drum equivalents (DE's) since the beginning of the Campaign in October 2011.
- Completed remediation of parent volume for Campaign in mid March, 2014.

### Building 375 (Box Line):

- The Box Line 375 has remediated 856.0 m3 of Legacy TRU Waste since the beginning of the Campaign in October 2011.
- Completed remediation of parent volume for Campaign in mid March, 2014.

### Dome 33 (Drum Venting):

- With completion of the drum venting for this Campaign during the 3rd Quarter of FY13, the drum venting process has focused on other scope.

### Building 412 (Box Line converted to Drum Line):

- During this Quarter, the Drum Line 412 processed 16.4 m3.
- Completed remediation of parent volume for Campaign in mid March, 2014.

### Dome 231 (Box Line):

- The Box Line 231 has processed 694.8 m3 of Legacy TRU Waste since the beginning of the Campaign in October 2011.
- Completed remediation of parent volume for Campaign in mid March, 2014.

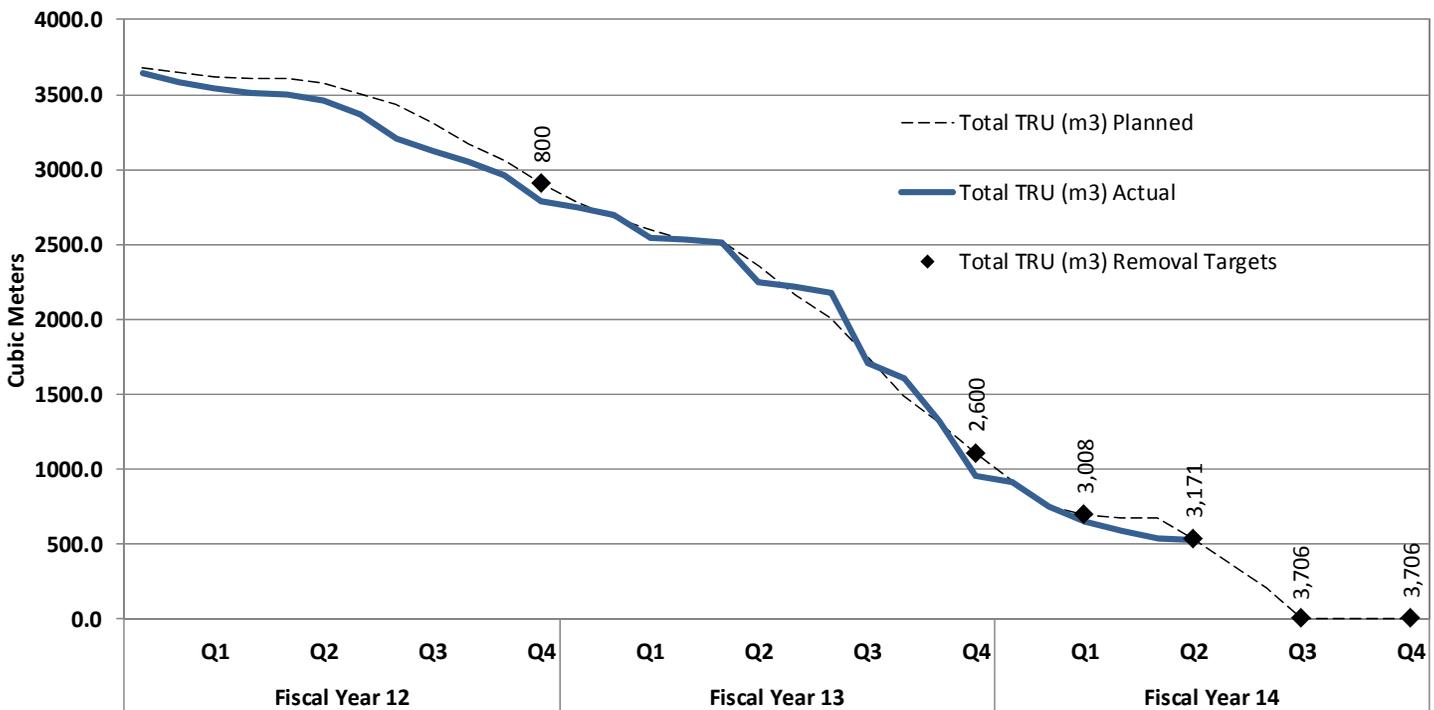
### Central Characterization Project (CCP):

- CCP has fully characterized 17,650 containers to the WIPP Waste Acceptance Criteria since the beginning of the Campaign in October 2011.
- During this Quarter, CCP fully characterized 1,523 containers related to the 3,706 Campaign.

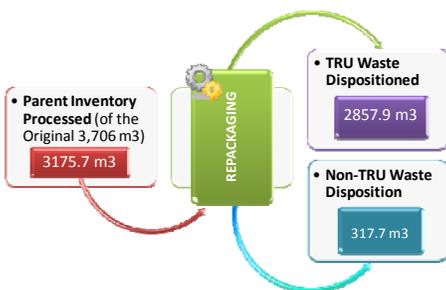
TRU Volume Removed					FY2012 thru 03/31/14			PROJECTIONS FOR NEXT QUARTER *	
SHIPMENTS * (as of 03/31/14)		2014 Goal	2012 Actual	2013 Actual	FY2014 Q2 Actual to Date	Cumulative Actual to Date	% Complete	Cumulative at End of Quarter	Cumulative % Complete
3,706 TRU Campaign	Volume (m3)	3706.0	920.1	1827.6	119.0	3175.7	86%	3706.0	100%
	Drum Equivalents	17817.3	4423.3	8786.6	572.2	15267.6		17817.3	
	Radioactivity (PE Ci)	41084.7	23075.2	8279.0	1367.0	35059.3	85%	41084.7	100%

## 3,706 LANL TRU Campaign Performance

(Target = 3,706 m3; Remaining = 530 m3)

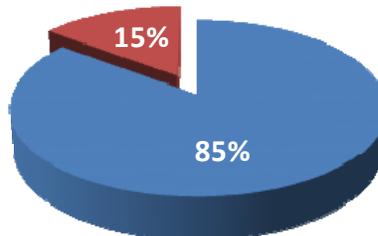


### Parent vs. Shipped Volumes



### MAR Removal - Total Campaign

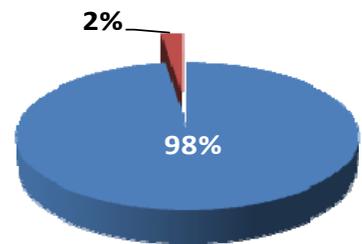
■ PE-Ci Removed ■ PE-Ci Remaining



Note: Volumes and percentages are rounded to nearest whole number.

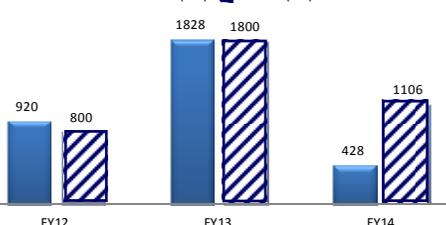
### FY12 Newly Generated

■ Containers shipped (466) ■ Containers remain to ship (11)



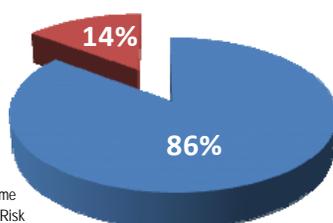
### 3,706 Goal vs. Progress (Volumes)

■ Actual (m3) ■ Planned (m3)



### 3,706 TRU Campaign Cumulative Progress

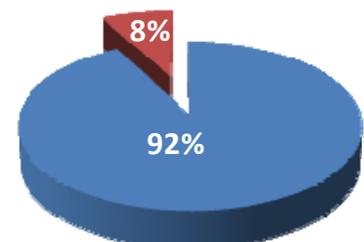
■ m3 Removed ■ m3 Remaining



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

### FY13 Newly Generated

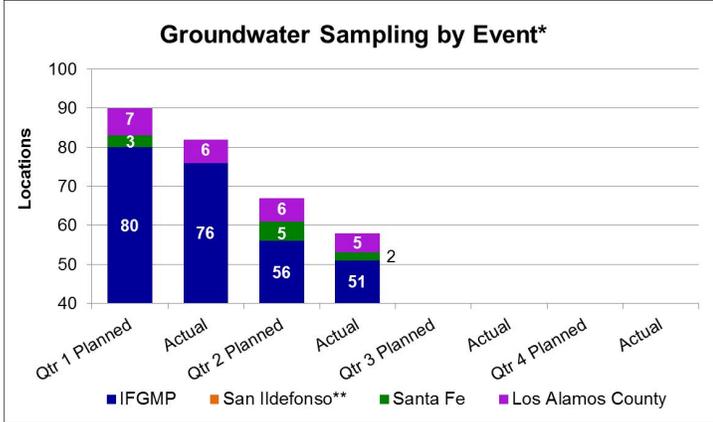
■ Containers shipped (525) ■ Containers remain to ship (43)



# LANL Water Protection Status Report — Fiscal Year 2014 Second Quarter (January to March 2014)

	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 Storm Water Permit (IP)	☑	☑		
Buckman Early Notification System operability at 100% per memorandum of understanding (MOU) requirements	☑	☑		

## Groundwater Protection



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

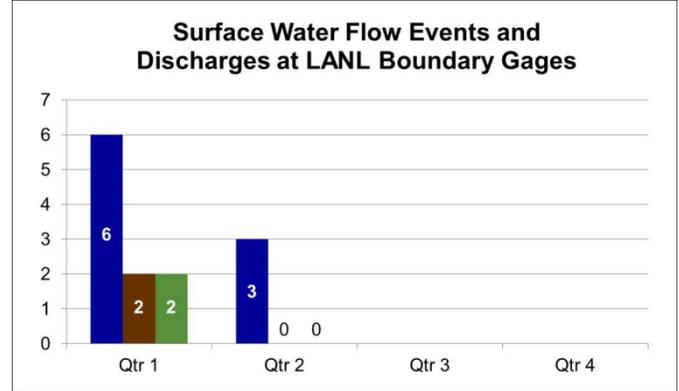
\*\* San Ildefonso locations included in both the IFGMP and San Ildefonso MOU are identified as San Ildefonso locations for this report.

### Second Quarter Sampling Event Deviation Explanations:

- (1) **IFGMP:** R-28 and R-42 stainless-steel sampling systems have been removed for aquifer tests; R-37 S1 pump malfunction; FLC-16-25280 dry; MSC-16-06295 destroyed in floods.
- (2) **San Ildefonso:** Not scheduled in the 2<sup>nd</sup> quarter.
- (3) **City of Santa Fe:** Sampling of the three Buckman production wells was canceled as requested by the City of Santa Fe.
- (4) **Los Alamos County:** One well (PM-4) was not operating.

FY14, 1<sup>st</sup> Quarter (Oct–Dec) Analytical Summary: Analysis of the 82 groundwater samples collected this quarter provided 24,763 analyte measurements of which no new exceedances were confirmed to be from a Los Alamos National Laboratory (LANL) source. (FY14, 2<sup>nd</sup> quarter analytical results are pending.)

## Surface Water Protection



■ Days with measured flow\* at any LANL gage station (>5 cubic feet per second [cfs])

■ Days with measured flow\* at LANL boundary stations E050.1, E060.1, E125, E229.3, E250, E265, E267, E275, and E338 (>5 cfs)

■ Days with measured flow\* at Buckman Early Notification Stations E050.1 and E060.1 (>5 cfs) from LANL watersheds.

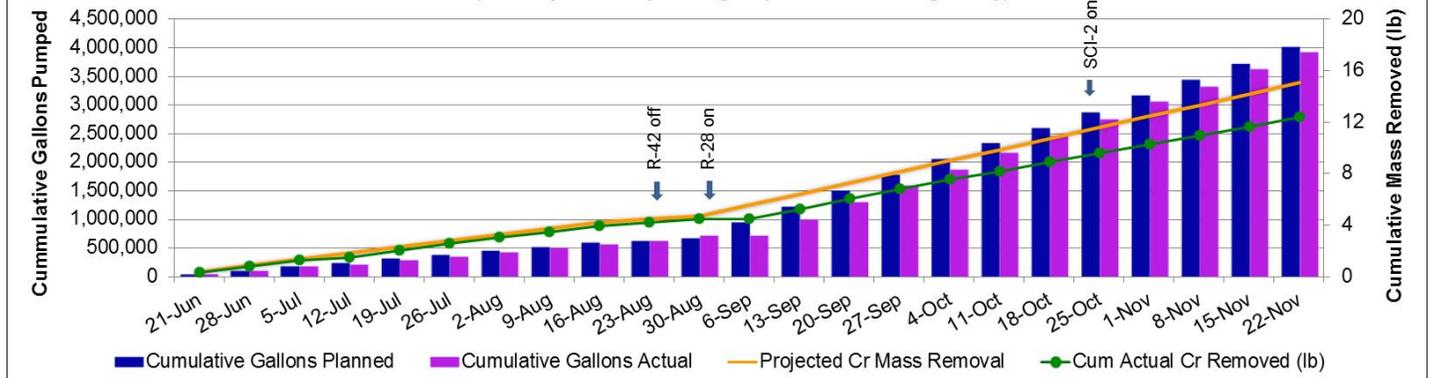
\*“Days with measured flow” is computed as the sum of the number of days each station exhibited flows greater than 5 cfs.

### Notes:

- (1) The following stations had data missing because of ice interference: E123, 25 days, and E245.5, 31 days. The only station to have flow >5 cfs was E123.

## Chromium Project Metrics

(from 4 p.m. Friday through 4 p.m. the following Friday)



### Notes:

- (1) Through the end of FY14, 1<sup>st</sup> quarter, a total of 12.37 lb of chromium was removed from the 3.9 million gallons of groundwater extracted from the aquifer below Mortandad Canyon.
- (2) Pumping was suspended for the winter and will resume with CrEx-1 in August 2014.