



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



JUL 15 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 Third Quarter Status Reports

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

As you know from public announcements and previous communications with the New Mexico Environment Department, the Department of Energy did not complete the 3706 TRU Waste Campaign by June 30, 2014. The Department is very disappointed that this commitment could not be delivered upon. Despite 10 quarters of strong performance, the issues at the Waste Isolation Pilot Plant (WIPP) and the issues generated by the nitrate salt wastes have necessitated the halt in shipments.

The Laboratory removed a cumulative total of 3,327.5 m³ of waste as of the end of June 2014. That equates to 93 percent of the campaign's Material at Risk being removed from the site, representing a significant risk reduction.

The Laboratory also made significant progress in removing newly generated waste: of the 477 containers of newly generated waste received in Fiscal Year (FY) 12 for disposal, only five (1 percent) remain to be shipped and of the 572 containers received in FY13, only 39 (7 percent) remain to be shipped.

While the Department realizes the June 30, 2014 Framework Agreement commitment was not met, the intent of the Agreement to address the highest risk environmental priorities and focus collaboratively on those priorities was achieved. Furthermore, significant risk reduction was achieved; conditions at the Labs waste storage areas significantly improved; and the focus on removing TRU waste from Los Alamos was correct. The enclosed quarterly status reports will be highlighted from a link on the LANL website and will be available for the public's review. If you have any questions, please contact David Nickless of my staff at (505) 665-6448.

Peter Maggiore *For*
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

B. Diamond, NA-GC, HQ/FORS

F. Marcinowski, EM-30, HQ/FORS

A. Harris, EM-31, HQ/GTN

C. Gelles, EM-30, HQ/GTN

K. Davis-Lebak, OOM, NA-LA

M. Duvall, OOM, NA-LA

T. O'Leary, BA, NA-LA

I. Valdez, 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, CBFO

JR. Stroble, WIPP, CBFO

E. Ziemianski, WIPP, GSA-220

R. McQuinn, WIPP, GSA-201

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-644-584563

LANL 3,706 TRU Campaign Status Report – FY14 3rd Qtr. (Apr. thru June 2014)

Processing Highlights

RANT (Shipping Facility):

- Completed 39 shipments this Quarter to Waste Control Specialists (WCS) for a cumulative total of 517 shipments from RANT since the Campaign began in October 2011.

WCRRF (High Activity Drum Line):

- The repackaging line has performed remediation on 1,507 drum equivalents (DE's) since the Campaign began in October 2011.

Building 375 (Box Line):

- The Box Line 375 has remediated 856.0 m3 of Legacy TRU Waste since the Campaign began in October 2011.

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 1.5 m3.

Dome 231 (Box Line):

- The Box Line 231 has processed 694.8 m3 of Legacy TRU Waste since the Campaign began in October 2011.

Central Characterization Project (CCP):

- During this Quarter, CCP fully characterized 45 containers related to the 3,706 Campaign.
- CCP has fully characterized 17,695 containers to the WIPP Waste Acceptance Criteria since the beginning of the Campaign in October 2011.

Other:

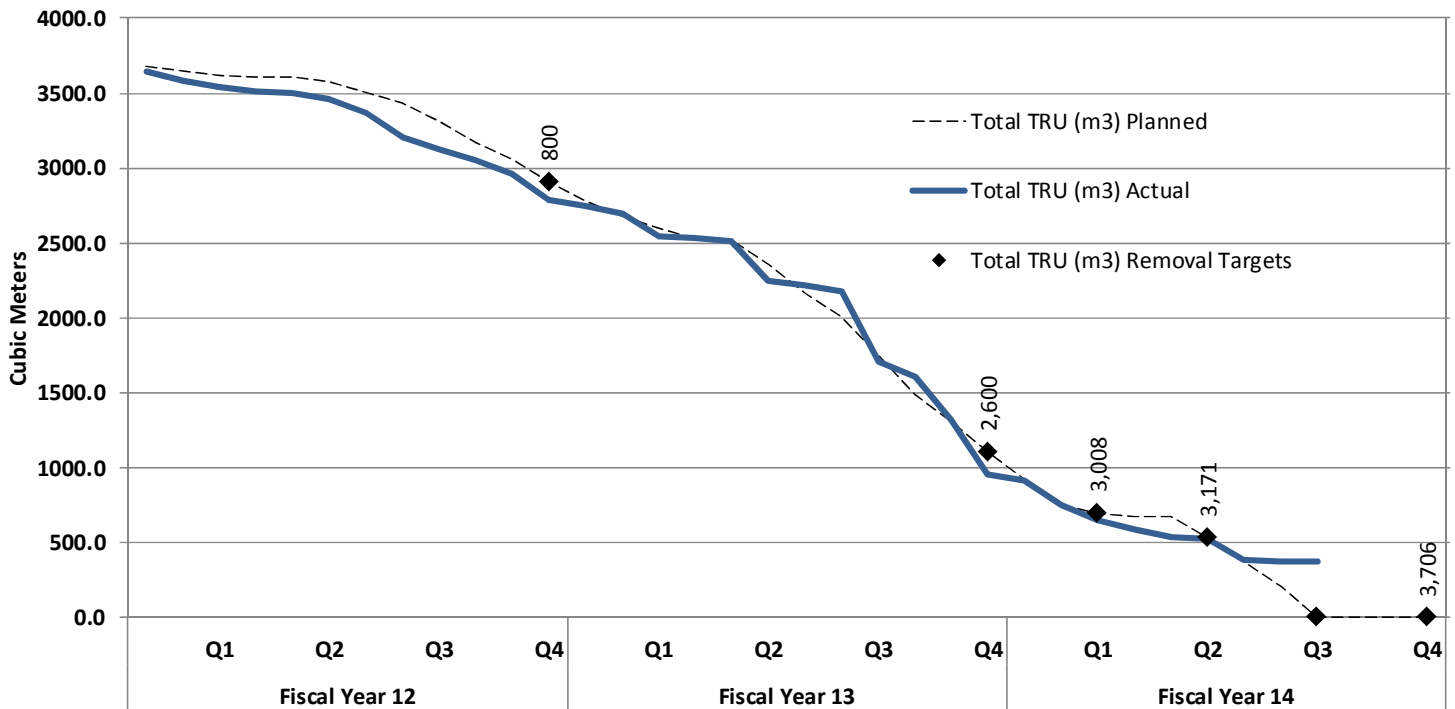
- In an effort to meet the June 30, 2014 Framework Agreement commitment, shipments to Waste Control Specialists in Andrews, TX commenced on April 1, 2014. The Shipments to WCS were curtailed on May 1, 2014 based on concerns raised by WIPP regarding the nitrate salt waste stream. On May 19, the Laboratory received an administrative order from NMED requiring the Department of Energy and LANS to submit a Los Alamos Laboratory Nitrate Salt-Bearing Waste Container Isolation Plan. The Plan was received by NMED on May 21, 2014 and was approved on May 23 with a request to resubmit the Plan to include additional information. The revised Plan was sent to NMED on May 29, 2014. The revised Plan has been implemented. TRU waste will continue to be stored at TA-54 pending WIPP recovery and resumption.

TRU Volume Removed				FY2012 thru 06/29/14			PROJECTIONS FOR NEXT QUARTER ¹			
SHIPMENTS * (as of 06/29/14)		2014 Goal	2012 Actual	2013 Actual	FY2014 Q3 Actual to Date	Cumulative Actual to Date	% Complete	Q4 Forecast	Cumulative at End of Quarter	Cumulative % Complete
3,706 TRU Campaign	Volume (m3)	3706.0	920.1	1827.6	151.8	3327.5	90%	0	3327.5	90%
	Drum Equivalents	17817.3	4423.3	8786.6	730.0	15997.7		0.0	15997.7	
	Radioactivity (PE Ci)	41084.7	23075.2	8279.0	3156.2	38229.5	93%	0	38229.5	93%

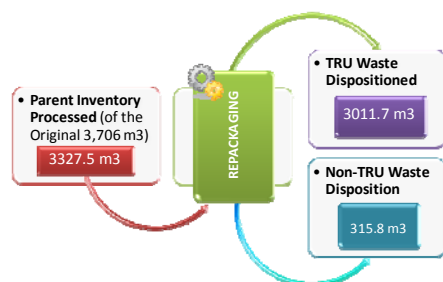
¹ Due to WIPP closure, TRU waste shipments are on hold indefinitely.

3,706 LANL TRU Campaign Performance

(Target = 3,706 m3; Remaining = 378 m3)

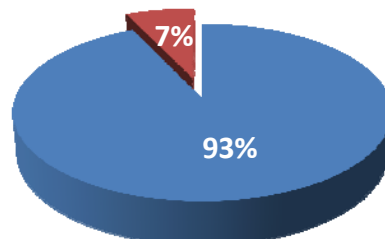


Parent vs. Shipped Volumes



MAR Removal - Total Campaign

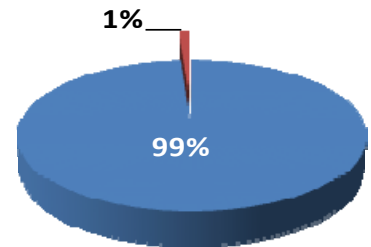
■ PE-Ci Removed ■ PE-Ci Remaining



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

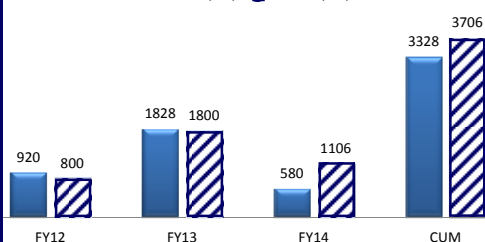
FY12 Newly Generated

■ Containers shipped (472) ■ Containers remain to ship (5)



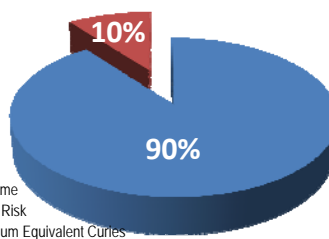
3,706 Goal vs. Progress (Volumes)

■ Actual (m3) ■ Planned (m3)



3,706 TRU Campaign Cumulative Progress

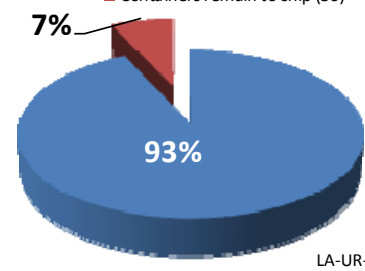
■ m3 Removed ■ m3 Remaining



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

FY13 Newly Generated

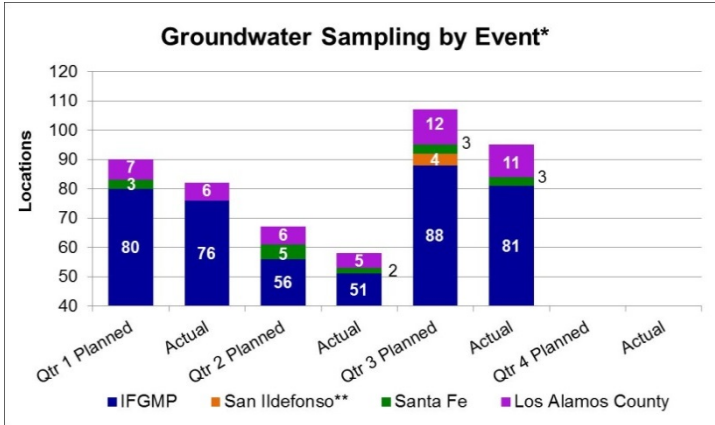
■ Containers shipped (533) ■ Containers remain to ship (39)



LANL Water Protection Status Report — Fiscal Year 2014 Third Quarter (April to June 2014)

	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th 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



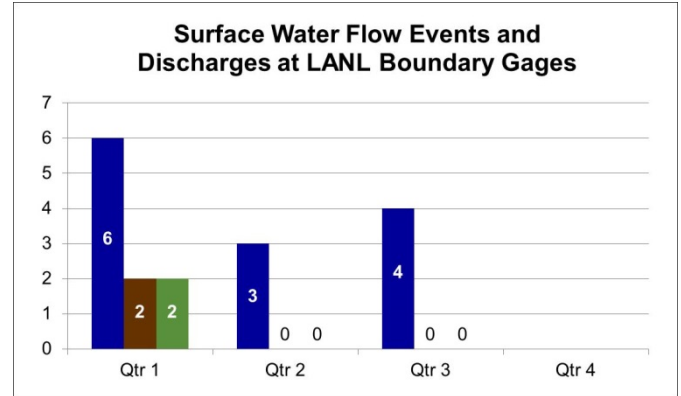
* An event is a single-screen well location, each individual well screen for multiscreen wells, spring, or base-flow location.
 ** San Ildefonso locations included in both the IFGMP and San Ildefonso MOU are identified as San Ildefonso locations for this report.

Third Quarter Sampling Event Deviation Explanations:

- (1) **IFGMP:** Twomile below TA-59 was dry; R-62 S2 not sampled because of representative issue; APCO-1 destroyed in flooding; LLAO-1b was dry; Los Alamos Spring was dry; Los Alamos Canyon near Otowi Bridge was dry; Vine Tree Spring was dry.
- (2) **San Ildefonso:** GU-0.01 Spring, LA-5, J. Martinez House Well, and Pajarito Well (Pump 1) not sampled because of access issue.
- (3) **City of Santa Fe:** None.
- (4) **Los Alamos County:** One well (PM-4) was not operating.

FY14, 2nd Quarter (Jan–Mar) Analytical Summary: Analysis of the 58 groundwater samples collected this quarter provided 13,131 analyte measurements of which no new exceedances were confirmed to be from a Los Alamos National Laboratory (LANL) source. (FY14, 3rd quarter analytical results are pending.)

Surface Water Protection



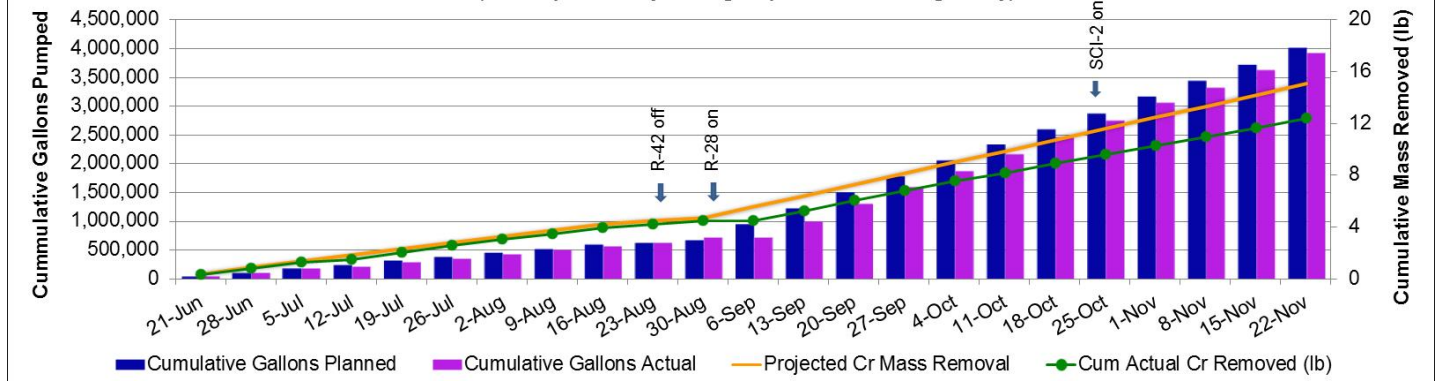
- Days with measured flow* at any LANL gage station (>5 cubic feet per second [cfs])
 - Days with measured flow* at LANL boundary stations E050.1, E060.1, E125, E229.3, E250, E265, E267, E275, and E338 (>5 cfs)
 - Days with measured flow* at Buckman Early Notification Stations E050.1 and E060.1 (>5 cfs) from LANL watersheds.
- *“Days with measured flow” is computed as the sum of the number of days each station exhibited flows >5 cfs.

Notes:

- (1) The only stations to have flow >5 cfs were E121, E122, and E123 located in upper Sandia Canyon, which has an urban runoff influence.

Chromium Project Metrics

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



- Notes:
- (1) Through the end of FY14, 1st 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 last November and will resume with CrEx-1 in August 2014.