



*Environmental Protection Division*  
 Water Quality & RCRA Group (ENV-RCRA)  
 PO Box 1663, MS K490  
 Los Alamos, New Mexico 87545  
 (505) 667-0666

Date: **FEB 05 2013**  
 Refer To: ENV-RCRA-13-0026  
 LAUR: 13-20651

Ms. Susan von Gonten  
 Petroleum Storage Tank Bureau  
 New Mexico Environment Department  
 Remedial Action Program  
 1301 Siler Road, Building B  
 Santa Fe, NM 87507

Dear Ms. Von Gonten:

**SUBJECT: 14 DAY SPILL REPORT FOR THE RLUOB DIESEL ABOVEGROUND STORAGE TANK SPILL AT THE LOS ALAMOS NATIONAL LABORATORY**

On January 22, 2013 representatives of the Los Alamos National Laboratory (LANL) discovered the presence of a diesel spill from an aboveground storage tank (AST) system at the LANL Technical Area 55. The AST system is the RLUOB 12,000 gallon emergency generator, NM Facility #54763. Pursuant to the New Mexico Petroleum Storage Tank (NMPST) regulations the spill was reported by telephone to the New Mexico Environment Department's Petroleum Storage Tank Bureau (NMED-PSTB) that same day and within 24 hours of discovery. A completed incident report form was submitted via email to the NMED-PSTB on January 23, 2013. In an email from you dated January 28, 2013 you stated we had complied with the 72-hour notice requirements. You further stated the 14 day written report was due on February 8, 2013.

The NMPST regulations, section 20.5.12.12 New Mexico Code Annotated (NMAC) "*Minimum Site Assessment, 72-Hour And 14 Day Reports*" require the submittal of a written 14 day report: the purpose of this letter is to fulfill the 14-day report requirement.

The following provides information on the thirteen items required under section 20.5.12.12.B NMAC for a 14 day report:

- 1) *a map based on a United States geologic survey topographic map showing locations of actual and potential receptors, including, but not limited to, private and public water supplies identified pursuant to Subsection A of 20.5.12.11 NMAC; owners and*

***operators shall draw two concentric circles, at 1,000 feet and at one mile radii from the center of the release, and shall also show on the map all surface water courses within a one mile radius of the site;***

A map of LANL and the RLUOB site is provided in Enclosure 1. Please note there are no private or public water supply wells within a mile perimeter of the release site.

**2) *information about any water supplies known or suspected to have been contaminated by the release;***

There were no water supplies contaminated by the release. The depth to ground water at the site is estimated to be about 1300 feet.

**3) *most likely direction of groundwater flow;***

Groundwater at the site flows towards the east- southeast.

**4) *a site plan map showing locations of utilities, surface structures and storage tank systems;***

The site map in Enclosure 2 has the locations of utilities, surface structures and AST system.

**5) *information about underground utilities gathered in accordance with Subsection E of 20.5.12.11 NMAC;***

The utilities at the site are all owned by the tank owner, the US Department of Energy.

**6) *soil borings, logs, and details of construction of all wells, if available;***

There are no nearby wells.

**7) *description of any actions taken to abate adverse effects;***

Emergency response team was immediately contacted after spill discovery; the AST system was shut down, valves were closed and electrical power to AST system was turned off; spilled product in sumps was pumped out; excavation of diesel-contaminated soil was initiated.

**8) *data from vapor monitoring performed in the vicinity of the site;***

Vapor monitoring was conducted in the adjacent buildings, TA-55-400 and TA-55-440 and around the AST using a photoionization meter and a Lower Explosive Limit (LEL) meter. The results are shown in Enclosure 3. No detectable vapors were found.

**9) *description of any actions taken to abate potentially explosive or harmful vapors and any plans for further action;***

The site was quickly secured by HAZMAT personnel and only authorized persons were allowed near the spill site. Explosive and/or harmful vapors were not deemed to be a

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threat. Product in sumps was removed and five yards<sup>3</sup> of contaminated soil was initially removed. Additional soil will be excavated and removed from the site.

**10) description of fire and safety hazards resulting from the release and actions taken to abate such hazards;**

LANL Emergency Response personnel with fire trucks and the LANL HAZMAT team were onsite within minutes after report of the spill. The AST system and spill area was cordoned off and the entire area was secured. Only essential personnel were allowed into the secured area. Electrical power to the AST system was turned off. Valves above the leaking pipe and valves inside the transition sumps were closed. Diesel product present in the two piping transition sumps was pumped out and the sump interiors were wiped down with absorbent pads. Emergency excavation permits were reviewed for the presence of utilities or other concerns. Emergency excavation was approved and a labor crew immediately began to hand shovel contaminated soil from the spill site. Approximately five yards<sup>3</sup> of contaminated soil was removed and placed into waste containers. Excavation ceased when concerns were raised over possible undermining and destabilization of the AST system concrete support pad. The excavation site was protected with plastic sheeting until permission for further soil removal has been granted.

**11) description of current and past ownership of the property, storage tank systems, the substance stored in the system, age of tank and history of any tank removals;**

The property and the storage tank system is owned by the U.S. Department of Energy and operated by Los Alamos National Security, LLC. The tank stores diesel fuel and was installed in April 2012 and first received fuel in July 2012. There have been no previous tanks at the RLUOB building site.

**12) present land use, within 1,000 feet of the site; and**

The site is within the boundaries of the Los Alamos National Laboratory and the RLUOB building is a nuclear facility. The land use is industrial.

**13) records of tightness tests, repairs to the storage tank system, release detection and monitoring results.**

Tightness tests were completed during AST system installation and copies of those are provided in Enclosure 4.

Further removal of diesel contaminated soil is planned as described in the soil removal work plan sent to NMED under separate cover. The Water Quality & RCRA Group (ENV-RCRA) will keep you informed of activities taken to remediate the site. If you have any questions, please contact Mr. Albert Dye of ENV-RCRA by telephone at (505) 667-4715 or by email at [dyea@lanl.gov](mailto:dyea@lanl.gov).

Sincerely,

  
Anthony R. Grieggs  
Group Leader,  
Water Quality & RCRA Group (ENV-RCRA)

ARG:AD/lm

- Enclosures:
1. LANL map with well locations within 1 mile of the RLUOB AST
  2. RLUOB AST Site Map
  3. RLUOB Vapor monitoring results
  4. RLUOB AST tank tightness test results

Cy: Joyce Shearer, NMED/PSTB, Santa Fe, NM, w/enc.  
Gene E. Turner, NA-OO-LA, w/enc., (E-File)  
Carl A. Beard, PADOPS, w/o enc., A102  
Michael T. Brandt, ADESH, w/o enc., (E-File)  
Alison M. Dorries, ENV-DO, w/o enc., (E-File)  
Clifford Kirkland, TA-55-RLW, w/enc., (E-File)  
Dianne Wilburn, ESHQ-DR, w/enc., (E-File)  
Randy Johnson, ENV-ES, w/enc., (E-File)  
[LASOmailbox@nnsa.doe.gov](mailto:LASOmailbox@nnsa.doe.gov), w/enc., (E-File)  
IRM-RMMSO File, w/enc., [locatsteam@lanl.gov](mailto:locatsteam@lanl.gov) (E-File)  
ENV-RCRA Correspondence File, w/enc., K490

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# ENCLOSURE 1

LANL map with well locations within 1 mile of the  
RLUOB AST

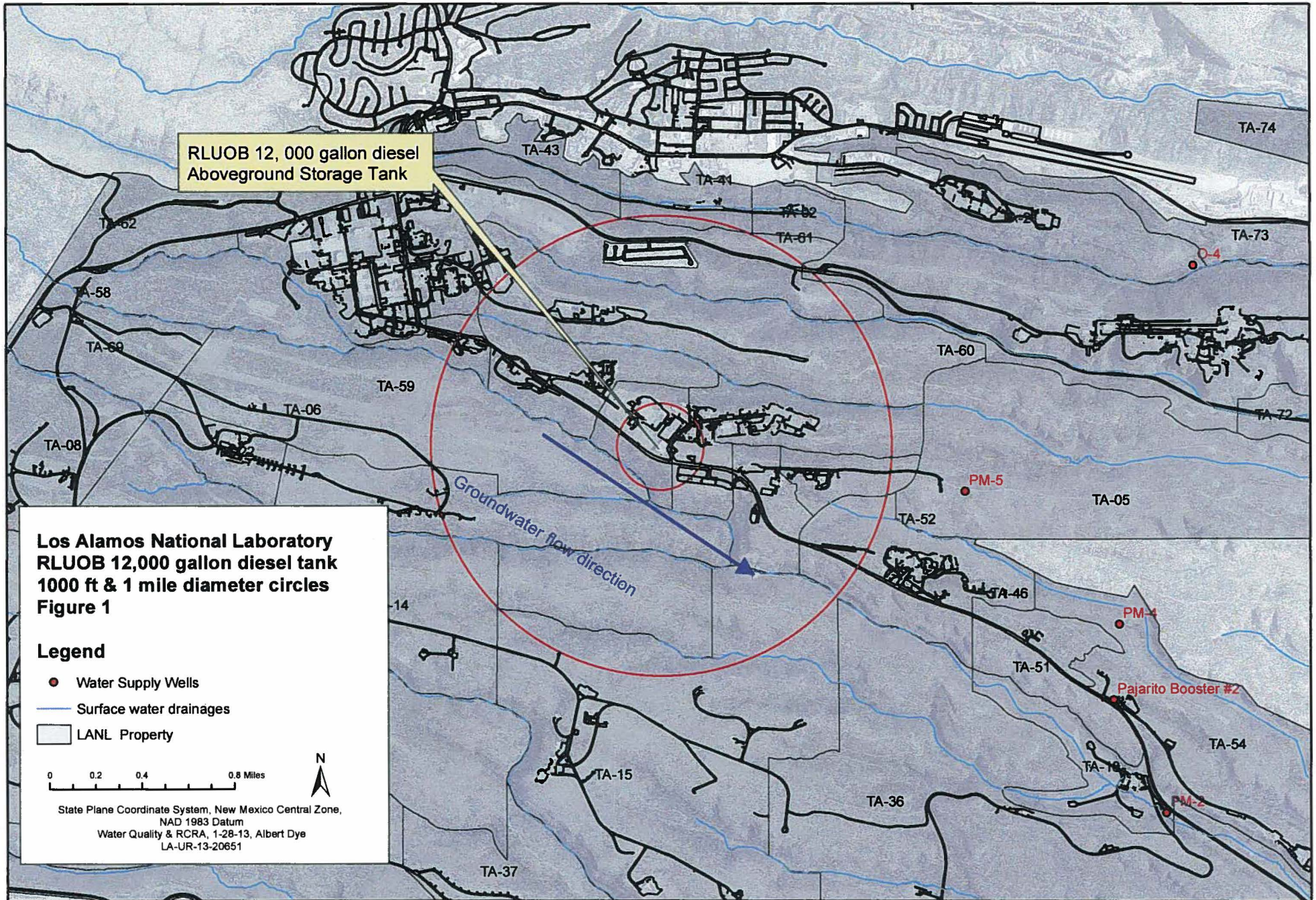
ENV-RCRA-13-0026

LAUR-13-20651

Date: \_\_\_\_\_

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**Los Alamos National Laboratory  
RLUOB 12,000 gallon diesel tank  
1000 ft & 1 mile diameter circles  
Figure 1**

**Legend**

- Water Supply Wells
- Surface water drainages
- LANL Property

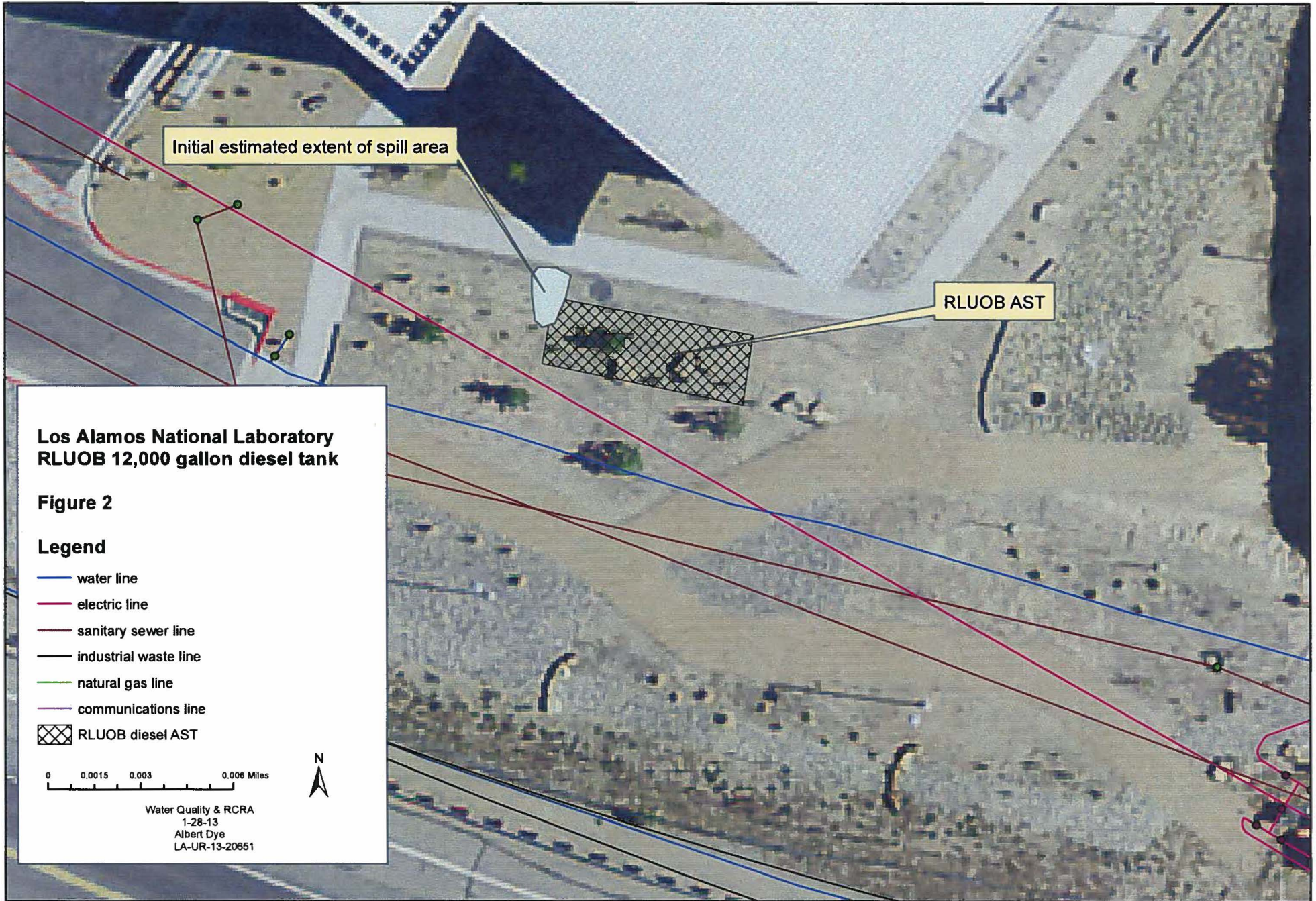
0 0.2 0.4 0.8 Miles



State Plane Coordinate System, New Mexico Central Zone,  
NAD 1983 Datum  
Water Quality & RCRA, 1-28-13, Albert Dye  
LA-UR-13-20651

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**From:** [Johnson, Randy](#)  
**To:** [Stone, Russell](#); [Wilburn, Dianne W](#); [Kirkland, Clifford W](#); [McKernan, Stuart A](#); [Dye, Albert](#); [Saladen, Michael T](#); [Howze, Stacy D](#)  
**Cc:** [Brown, Carol A](#)  
**Subject:** Field survey for "potentially explosive or harmful vapors" in the vicinity of AST 55-560  
**Date:** Wednesday, January 30, 2013 2:14:58 PM

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All,

NMED PSTB regulation 20.5.12.11 MINIMUM SITE ASSESSMENT, INITIAL ABATEMENT: F. states; "Owners and operators shall complete an investigation to determine whether potentially explosive or harmful vapors are present in any building, utility corridor, basement, or other surface or subsurface structure on or adjacent to the release site."

In response to the diesel fuel release from AST 55-560 and per NMED PSTB 20.5.12.11. F, Carol Brown , TA-55 Deployed Safety Professional, conducted a field survey of the interior of buildings adjacent to the diesel fuel release from AST 55-560 using a photoionization detector (PID) and a four gas/LEL meter. Following are the results of this survey:

Area	PID reading	LEL
55-440 CUB basement:	0	0
55-440 CUB 1 <sup>st</sup> Flr, Loading Dock:	0	0
55-400 RLUOB Basement (freight Elevator)	0	0
55-400 RLUOB South stairwell 1 <sup>st</sup> Flr	0	0
55-400 RLUOB South stairwell 2 <sup>nd</sup> Flr	0	0
AST 55-560 Ground surrounding	0	0

Please contact me with any questions concerning this survey.

Randy Johnson  
 Environmental Professional  
 TA-55 Facility Operations  
 Los Alamos National Laboratory  
 Office Phone: 505-667-0509  
 Pager: 664-5178

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# Air Pressure or Hydrostatic Field Test

Field/Location/Address: Los Alamos, TA55 RLUOB Bldg

Customer or Owner: Kiewit Customer / LANL owners Agent

5/4/12 Item: Test Interstitial w/ 1/2 lb air or psi. Started at 1:20 PM, Held for 1st Hour until 2:20 PM, started Recorded Test at 2:20 PM, Witnessed every hour for an additional 3 hours until 5:20 PM. 30min     , 1hr 3HRS Recorded ✓

5/3/12 Item: Test Primary per tank manufacturers requirements to meet state NMPSTB G14.8 psi 4:17 PM G14.9 psi 5:17 PM 30min     , 1hr      ✓

5/3/12 Item: Bleed air from primary to secondary or interstitial, let settle, recorded pressure air for one hour. 30min     , 1hr      ✓  
Start 5:56 PM / Inter  
G24.4 5:58 PM / Second

Item: \_\_\_\_\_ 30min     , 1hr     

Item: \_\_\_\_\_ 30min     , 1hr       
Finish G14.8 7:06 / Inter  
G24.8 7:06 / Second

Fire Department/NMPSTB/Other LANL Print Name: DON J. DAVIS

Ph.# (505) 412-8772 Signature: [Signature] Date: \_\_\_\_\_

Customer Representative Kiewit NM Print Name: Chris Compton

Ph.# 505-423-2403 Signature: [Signature] Date: 5-7-12

Eaton Field Representative Print Name: Mark Berent  
Ted Gonzalez

Ph.# 345-4577 Signature: [Signature] Date: 5/7/12  
345-4577 [Signature] 5-7-12

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2-2" DW Underground Lines,  $\approx$  320 Linear Feet  
2-Poly Underground Transition Sumps  
Air Pressure or Hydrostatic Field Test

Field/Location/Address: Los Alamos, TA55 RLUOB Bldg

Customer or Owner: Kiewit Customer / LANL Owners Agent

Thurs. (Air Test)  
4/26/12 Item: Primary APT Flexible Piping 30min , 1hr  Passed  
Tested at 50psi, 2 inch

Thurs. (Air Test)  
4/26/12 Item: Secondary APT Ribbed Area 30min , 1hr  Passed  
Tested at 5psi, 2 inch Secondary

Thurs. (Air Test)  
4/26/12 Item: Ducting or Access 4" Blue 30min , 1hr   
Tested at 2psi, 4" Duct Pipe

Thurs. Hydrostatic Water Test  
4/26/12 Item: SKid Sump At Tank 30min , 1hr  Passed

Thurs. Hydrostatic Water Test  
4/26/12 Item: Cub Sump At Building 30min , 1hr  Passed

Fire Department/NMPSTB/Other Print Name: Albert Dye

Ph.# 667-4715 Signature: Albert Dye Date: 4/26/12

Customer Representative Print Name: Chris Compton  
Kiewit NM

Ph.# 505-423-2403 Signature: [Signature] Date: 4/26/12

Eaton Field Representative Print Name: LARRY HANBLIN / Certified Installer  
Eaton Sales + Service

Ph.# 345-4577 Signature: [Signature] Date: 4/26/12  
For Larry Hanblin

Attached Eaton Job Daily Recap. - Larry's Tasks

2 of 2. Reviewed & Approved By: Mark Berent / Eaton  
Mark Berent 4/27/12

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**From:** [Medina, Louella B](#)  
**To:** [Turner, Gene E](#); [Kirkland, Clifford W](#); [Dye, Albert](#); [Wilburn, Dianne W](#); [Johnson, Randy](#); [Saladen, Michael T](#); [locatesteam](#); [LASOmailbox@nnsa.doe.gov](mailto:LASOmailbox@nnsa.doe.gov)  
**Subject:** 14 Day Spill Report for the RLUOB Aboveground Storage Tank Spill  
**Date:** Tuesday, February 05, 2013 11:37:09 AM  
**Attachments:** [13-0026 Feb-05 14 Day Spill Report RLUOB Diesel AST Spill.pdf](#)

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Attached is the official electronic distribution of the ENV-RCRA-13-0026 letter; 14 Day Spill Report for the RLUOB Aboveground Storage Tank Spill.

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**Louella B. Medina**

WQ & RCRA Group (ENV-RCRA)  
TA-59-0053-107, K490  
PHONE: 505-667-0666  
Schedule 'B'

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