

LA-UR-12-22808

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Title: Class 1 Permit Modification Notification Addition of Structures within
Technical Area 54, Area G, Pad 11, Dome 375 Los Alamos National
Laboratory Hazardous Waste Facility Permit, July 2012

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Lechel, Robert A.

Intended for: Review and Approval by NMED-HWB
Report
Environmental Programs



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



Mr. John E. Kieling, Chief
New Mexico Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

JUL 30 2012

Dear Mr. Kieling:

Subject: Notification of Class I Permit Modification for the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit to Add Structures to a Container Storage Unit, EPA ID # NM0890010515

The purpose of this letter is to notify the New Mexico Environment Department – Hazardous Waste Bureau (NMED-HWB) of a Class 1 Permit Modification to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit issued to the Department of Energy (DOE) and Los Alamos National Security, LLC (LANS) in November 2010. The modification adds structures to the container storage unit at Technical Area (TA) 54 Area G, Pad 11.

Permit Section 3.1(3) requires that changes to the location of a structure that does not manage hazardous waste shall be changed within the Permit as a Class 1 modification without prior approval in accordance with Code of Federal Regulations, Title 40 (40 CFR), §270.42(a)(1). Structures have been added within Dome 375 located at TA-54, Area G, Pad 11 that will be used in support of waste management operations within Dome 375 and the modular panel containment structure located within Dome 375, but will not be used as waste management structures. The Class 1 Permit Modification revises Figure 36 in Attachment N, *Figures*; and Figure G.12-1 in Attachment G.12, *Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Closure Plan*. Descriptions of the structures have also been added to Section A.4.2.9 in Attachment A, *TA – Unit Descriptions*; and Section 2.0 in Attachment G.12, *Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Closure Plan*. Full description of the permit modification and the necessary changes are included in Enclosure 1.

The modification has been prepared in accordance with 40 CFR §270.42(a)(1). This package includes this letter and an enclosure containing a description of the permit modification, text edits of the Permit sections, and the revised figures (collectively LA-UR-12-22808). Accordingly, a signed certification page is also enclosed. Three hard copies and one electronic copy of this submittal will be delivered to the NMED-HWB.

A notice will be sent to the NMED-HWB-maintained LANL facility mailing list in accordance with the conditions specified in 40 CFR 270.42(a)(1)(ii). If you have comment or questions regarding this permit modification, contact Gene Turner of my staff at (505) 667-5794 or Mark Haagenstad, LANS, at (505) 665-2014.



For Kevin W. Smith
Manager

Enclosure:

Class 1 Permit Modification Notification Addition of Structures within Technical Area 54, Area G, Pad 11, Dome 375 Los Alamos National Laboratory Hazardous Waste Facility Permit July 2012

cc w/enclosure:

Laurie King, Chief
New Mexico/Federal Facilities Section
Environmental Protection Agency
Region 6 1445 Ross Avenue, Suite 1200 (6PD-N)
Dallas, TX 75202-2733

P. Maggiore, EPO, LASO
G. Turner, EPO, LASO
C. Beard, PADOPS, LANS, MS-A102
M. Brandt, ADESH, LANS, MS-K491
C. Lenoie, PMFS-DO, LANS, MS-J496
M. Haagenstad, ENV-RCRA, LANS, MS-K404
R. Lechel, ENV-ES, LANS, MS-J967
LASO Records Center
Official Contract File

cc w/out enclosure:

Tim Hall
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

EPO-32GT-360-453776

ENCLOSURE 1

**Class 1 Permit Modification Notification Addition of Structures within
Technical Area 54, Area G, Pad 11, Dome 375**

Los Alamos National Laboratory Hazardous Waste Facility Permit

ENV-RCRA-12-0163

LAUR-12-22808

Date: **JUL 30 2012**

Permit Modification Notification

This document contains a notification for a Class 1 Permit Modification to modify the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (Permit). The text modifications and related figures are provided herein. The modifications to the text of the Permit have been identified using red text and a single underline.

Description

The modification adds structures to the container storage unit at Technical Area (TA) 54 Area G, Pad 11. Structures that will not be used to manage hazardous waste have been added within Dome 375 located at TA-54, Area G, Pad 11.

Basis

Permit Section 3.1(3) requires that changes to the location of a structure that does not manage hazardous waste shall be changed within the Permit as a Class 1 modification without prior approval in accordance with Code of Federal Regulations, Title 40 (40 CFR), §270.42(a)(1). The office, dress-out areas, and control area structures will be used in support of waste management operations within Dome 375 and the modular panel containment structure located within Dome 375, but will not be used as waste management structures.

Discussion

Descriptions of the structures have been added to Section A.4.2.9 in Attachment A, *TA – Unit Descriptions*; and Section 2.0 in Attachment G.12, *Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Closure Plan*. Revised figures are Figure 36 in Attachment N, *Figures*; and Figure G.12-1 in Attachment G.12, *Technical Area 54, Area G, Pad 11, Outdoor Container Storage Unit Closure Plan*.

The structures will not be used for waste management activities; therefore, changes have not been made to the proposed sampling locations or the structural assessment sections of the closure plan or to the list of active units in Attachment J, *Hazardous Waste Management Units*.

Revised Permit Text

Attachment A, Technical Area (TA) – Unit Descriptions

A.4.2.9 Pad 11

This asphalt pad is approximately 4 inches thick, measures approximately 478 ft long by 137 ft wide, and is sloped approximately 1 to 2% to the southeast. Storage dome 375 is located on the western portion of pad 11 and is used for storage of hazardous, mixed low level, and mixed transuranic waste. It measures approximately 300 ft long by 100 ft wide (see Figure 36 in Attachment N (*Figures*)). The building is an aluminum A-frame truss design that is anchored to a concrete ring wall. The dome is of modular construction utilizing a membrane or fabric covering. It is equipped with 14 personnel doors and two roll-up doors, one each at the east and west ends of the building. Ramped entrances allow for safe movement of container handling equipment and vehicle access. Dome 375 contains a modular panel containment structure (approximately 120 feet long x 60 feet wide) used for size reduction, decontamination, segregation, waste assay, reclassification activities, and repackaging of transuranic waste prior to shipment offsite. Dome 375 also contains four structures that serve as an office area, a control area, and rooms for donning and doffing anti-contamination clothing. These structures are support structures and will not be used to store hazardous waste. The Real-Time Radiography (RTR) system #1 is designed to provide X-ray examination of the contents of a waste drum. The unit, RTR1, has been located on Pad 11 in support of the transuranic waste characterization operations.

Attachment G.12, Technical Area 54, Area G, Pad 11, Outdoor Container Storage Unit Closure Plan

2.0 DESCRIPTION OF UNIT TO BE CLOSED

A specific description of the permitted unit can be found in Permit Attachment A (*Technical Area Unit Descriptions*). Additional features and equipment located the permitted unit and not discussed within the Permit are described below.

The permitted unit, which was constructed in 1998, is located in the western portion of Area G and consists of an asphalt pad that measures 478 feet long and 137 feet wide or approximately 65,500 square feet. It consists of four inches of asphalt built over underlying base course which overlies a minimum of six inches of tuff fill. It also has a dome (Dome 375) and a Real-Time Radiography (RTR) system #1 situated on it. Hazardous waste is stored only in the Dome 375.

The permitted unit is sloped from 1% to 2% to the south/southeast for drainage and has curbing on the south and east sides as well. Drainage is directed to a series of four 5 inch-wide by 27 foot-long drains, all connected to two underground 8-inch diameter polyvinyl chloride pipes which discharge to a concrete lined ditch located near the southeast corner of the pad.

The permitted unit stores hazardous waste in both liquid and solid form in Dome 375. The dome, which is an aluminum framework of trusses covered with tension-fitted ultraviolet resistant, fire-retardant coated, polyester fabric, is 300 feet long by 100 feet wide and covers a surface area of approximately 30,000 square feet. It is anchored with anchor bolts to the interior concrete ring wall and is equipped with

two double-panel rolling doors, one at the east end of the dome and the other on the west end. It also has 14 personnel doors located approximately every 31 to 57 feet along the dome's length. These doors allow for adequate access both by vehicles and by personnel. The interior perimeter of the dome is surrounded by a concrete ring wall, which helps prevent run-on into and runoff from the dome. Asphalt ramps located at the vehicle entrances allow vehicles and container handling equipment to pass safely over the curb. Dome 375 contains a modular panel containment structure (approximately 120 feet long x 60 feet wide) used for size reduction, decontamination, segregation, waste assay, reclassification activities, and repackaging of transuranic waste prior to shipment offsite. Dome 375 also contains four structures that serve as an office area, a control area, and rooms for donning and doffing anti-contamination clothing. These structures are support structures and will not be used to store hazardous waste.

The RTR1 is designed to provide X-ray examination of the contents of a waste drum. The unit, RTR1, has been located on Pad 11 in support of the transuranic waste characterization operations.

Permit Part 3 (*Storage in Containers*), Permit Attachment A (*Technical Area Unit Descriptions*), Permit Attachment B (*Part A Application*), and Permit Attachment C (*Waste Analysis Plan*), include information about waste management procedures and hazardous waste constituents stored at the permitted unit.

Revised Figures

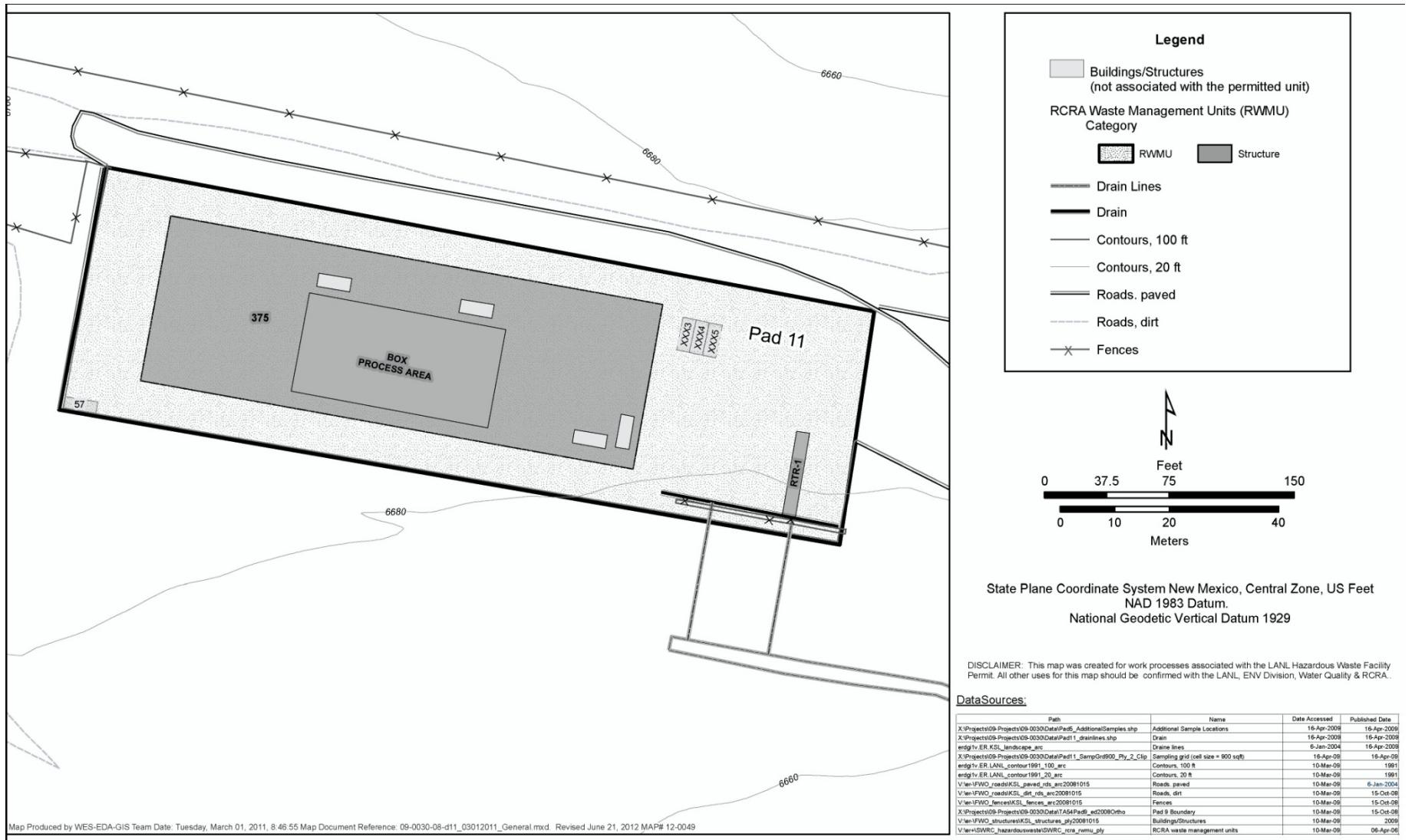
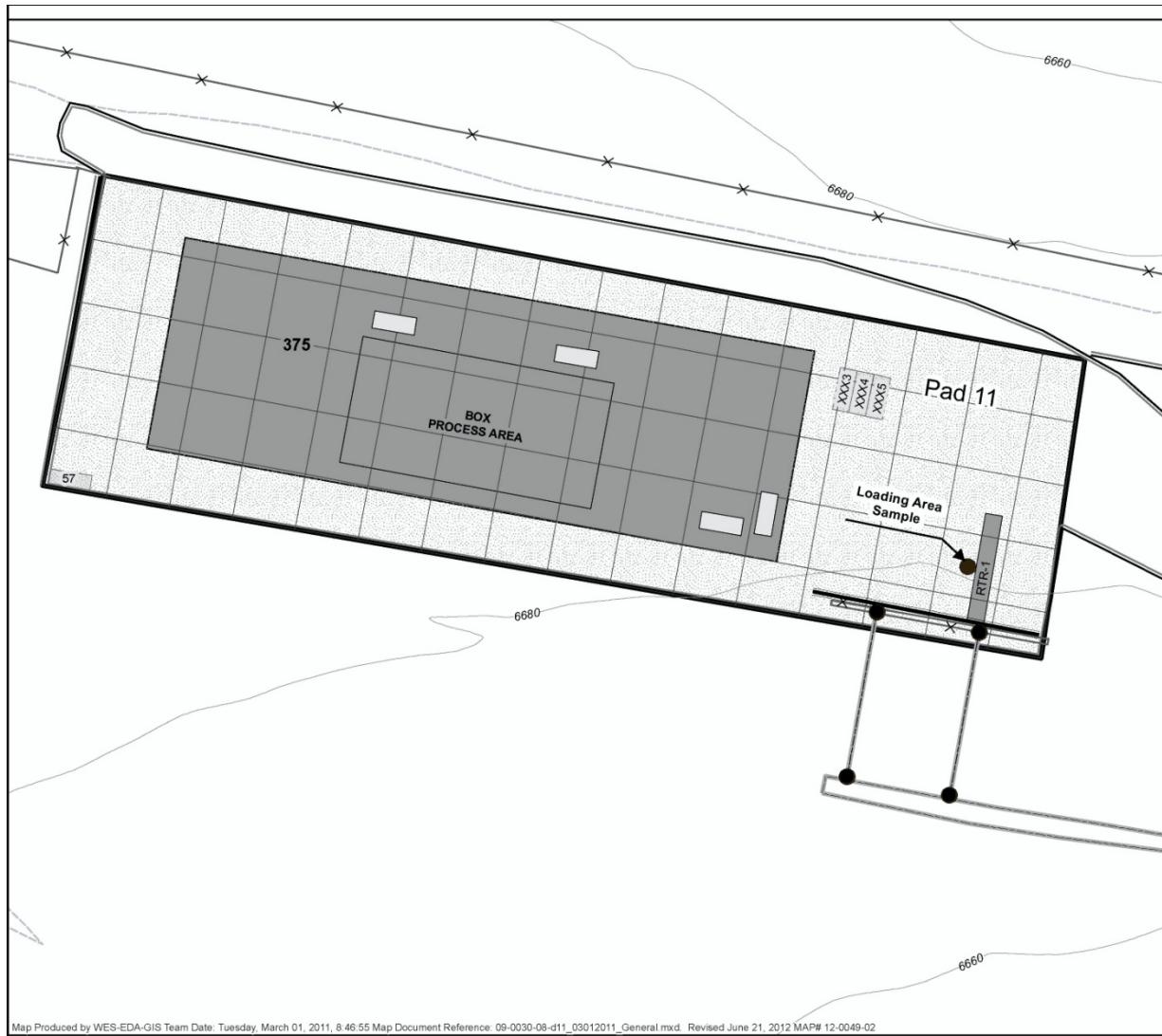
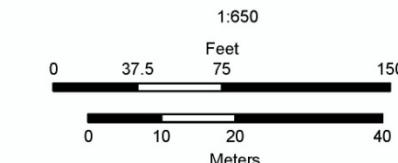
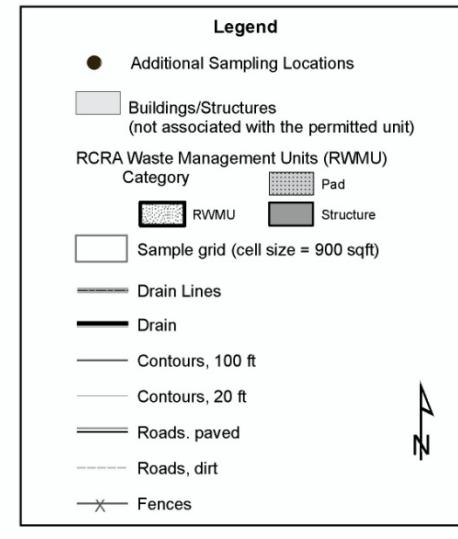


Figure 36: TA-54, Area G, Pad 11



Permitted Unit Soil Sampling Grid



State Plane Coordinate System New Mexico, Central Zone, US Feet
NAD 1983. Datum National Geodetic Vertical Datum 1929

DISCLAIMER: This map was created for work processes associated with the LANL Hazardous Waste Facility Permit. All other uses for this map should be confirmed with the LANL, ENV Division, Water Quality & RCRA.

DataSources:

Path	Name	Date Accessed	Published Date
X:\Project09\Project09-0030\Data\Pad11\AdditionalSamples.shp	Additional Sample Locations	16-Apr-2009	16-Apr-2009
X:\Project09\Project09-0030\Data\Pad11_drainlines.shp	Drain	16-Apr-2009	16-Apr-2009
erdr1v.ER_KSL_landscape.arc	Drain lines	6-Jan-2004	16-Apr-2009
X:\Project09\Project09-0030\Data\Pad11_SampleGrid900_Ply_2_Clip	Sampling grid (cell size = 900 sqft)	16-Apr-09	16-Apr-09
erdr1v.ER_LANL_contour1991_100.arc	Contours, 100 ft	10-Mar-09	1991
erdr1v.ER_LANL_contour1991_20.arc	Contours, 20 ft	10-Mar-09	1991
V:\er\FWHO\roads\KSL_paved_rds_rch_erc20090105	Roads, paved	10-Mar-09	6-Jan-2004
V:\er\FWHO\roads\KSL_dirt_rds_rch_erc20090105	Roads, dirt	10-Mar-09	15-Oct-08
V:\er\FWHO\fences\KSL_fences_rch_erc20090105	Fences	10-Mar-09	15-Oct-08
X:\Project09\Project09-0030\Data\TA54Pad9_ec2009Ortho	Pad 9 Boundary	10-Mar-09	15-Oct-08
V:\er\SWRC_structures\KSL_structures_ply20080105	Buildings/Structures	10-Mar-09	2009
V:\er\SWRC_hazardouswaste\SWRC_rcra_rwmu_ply	RCRA waste management units	10-Mar-09	06-Apr-06

Figure G.12-1: Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Grid Sampling and Additional Sampling Locations

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



7/17/12

Alison M. Dorries
Division Leader
Environmental Protection Division
Los Alamos National Laboratory
Operator

Date Signed



7/30/12

For **Kevin W. Smith**
Manager
Los Alamos Site Office
National Nuclear Security Administration
U.S. Department of Energy
Owner/Operator

Date Signed

COPY



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



Mr. John E. Kieling, Chief
New Mexico Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

JUL 30 2012



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