Los Alamos NATIONAL LABORATORY EST 1943

EM-LA

ESHID-602336

Environmental Protection & Compliance Division
Environmental Compliance Programs
PO Box 1663, K491
Los Alamos, New Mexico 87545
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Environmental Management
Los Alamos Field Office
1900 Diamond Drive, M984
Los Alamos, New Mexico, 87544
(505) 665-5820/Fax (505) 665-5903

Date: APR 25 2017
Symbol: EPC-DO: 17-134
LA-UR: 17-22537
Locates Action No.: N/A

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

SUBJECT: Notification of Class 1 Permit Modification to Update Figures in the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit

Dear Mr. Kieling:

The purpose of this letter is to submit a Class 1 permit modification notification to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit, EPA ID No. NM0890010515—issued to the Department of Energy and Los Alamos National Security, LLC (the Permittees) in November 2010. The permit modification provides revisions to figures in Permit Attachments N, G.6, G.9, G.11, G.12 and G.14. Text revisions related to figure changes are also provided for Permit Attachments G.6 and G.12.

The proposed modifications have been prepared in accordance with the Code of Federal Regulations [CFR], Title 40 (40 CFR) § 270.42(a). This Class 1 permit modification consists solely of administrative changes in accordance with 40 CFR § 270.42, Appendix I, Item A.1 and Permit Section 3.1(3). Permit Section 3.1(3) requires that all figures accurately reflect the location of all buildings and structures, regardless of whether they manage hazardous waste.

This permit modification package includes this transmittal letter and an enclosure with a description of changes, pages of the revised text in Attachments G.6 and G.12, and replacement figures (LA-UR-17-22537). Accordingly, a signed certification page has also been included.

Included herein are three hard copies and one electronic copy of this submittal. The hardcopy submittal contains pages or sections where text has been changed, rather than copies of the entire collection of Permit attachments. The electronic copy is provided only to the New Mexico Environment Department Hazardous

Waste Bureau (NMED-HWB) and contains a reproduction of the hardcopy in portable document format (PDF) along with all the word processing files used to create the hardcopy.

Notification of this modification will be sent to the NMED-HWB maintained LANL facility mailing list in accordance with 40 CFR § 270.42(a)(1)(ii) within ninety days of the transmittal of this permit modification.

If you have comments or questions regarding this permit modification please contact Mark P. Haagenstad, LANS, at (505) 665-2014 or David S. Rhodes, Environmental Management Los Alamos Field Office, at (505) 665-5325.

Sincerely,

John C. Bretzke
Division Leader
Environmental Protection & Compliance Division
Los Alamos National Security, LLC

Sincerely,

Arturo Duran
Permitting and Compliance Manager
Environmental Management
Los Alamos Field Office

JCB:AD:FN/eim

Enclosure 1: Class 1 Permit Modification to Update Figures in the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit

Copy: Butch Tongate, NMED/HWB, Santa Fe, NM, (E-File)
Laurie King, USEPA/Region 6, Dallas, TX (E-File)
Dave Cobrain, NMED/HWB, Santa Fe, NM, (E-File)
Neelam Dhawan, NMED-HWB, Santa Fe, NM, (E-File)
Siona Briley, NMED-HWB, Santa Fe, NM (E-File)
Kimberly Davis Lebak, NA-LA, (E-File)
Peter Maggiore, NA-LA, (E-File)
Karen E. Armijo, NA-LA, (E-File)
Jody Pugh, NA-LA, (E-File)
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Michael T. Brandt, ADESH, (E-File)

Raeanna Sharp-Geiger, ADESH, (E-File)
David J. Funk, ADEM, (E-File)
Randall M. Erickson, ADEM, (E-File)
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adesh-records@lanl.gov, (E-File)
emla.docs@em.doe.gov, (E-File)
rcra-prr@lanl.gov, (E-File)

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The proposed modifications have been prepared in accordance with the Code of Federal Regulations [CFR], Title 40 (40 CFR) § 270.42(a). This Class 1 permit modification consists solely of administrative changes in accordance with 40 CFR § 270.42, Appendix I, Item A.1 and Permit Section 3.1(3). Permit Section 3.1(3) requires that all figures accurately reflect the location of all buildings and structures, regardless of whether they manage hazardous waste.

This permit modification package includes this transmittal letter and an enclosure with a description of changes, pages of the revised text in Attachments G.6 and G.12, and replacement figures (LA-UR-17-22537). Accordingly, a signed certification page has also been included.

Included herein are three hard copies and one electronic copy of this submittal. The hardcopy submittal contains pages or sections where text has been changed, rather than copies of the entire collection of Permit attachments. The electronic copy is provided only to the New Mexico Environment Department Hazardous

ENCLOSURE 1

Class 1 Permit Modification to Update Figures in the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit

EPC-DO:17-134

LA-UR-17-22537

Date: APR 25 2017

Permit Modification Notification

This document contains a notification for a Class 1 permit modification to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (Permit) issued to the Department of Energy and the Los Alamos National Security, LLC, collectively known as the Permittees, in November 2010. Changes for Permit Attachments G.6 and G.12, shown in red editing marks, and replacement figures for Attachments N, G.6, G.9, G.11, G.12 and G.14 are enclosed as Attachment 1 to this notification and described below.

Description

The purpose of this modification submittal is to correct figures in Attachments N (*Figures*) and G (*Closure Plans*). These figure changes are associated with permitted units, but they are not associated with structures used for hazardous waste management at the permitted units.

Basis

This modification has been prepared in accordance with Permit Section 3.1(3) and the Code of Federal Regulations, Title 40 §270.42 Appendix I, Item A.1. Permit Section 3.1(3) requires that the figures in Attachment N and Attachment G accurately reflect the location of all buildings and structures at hazardous waste management units, regardless of whether they manage hazardous waste. As outlined in Item A.1 of Appendix I, the changes included with this Class 1 permit modification are administrative in nature and do not require prior approval.

Discussion of Changes

Pad 1

Figure 29 (*TA-54, Area G, Pad 1*) of Attachment N and Figure G.6-1 (*Technical Area 54, Area G, Pad 1 Outdoor Container Storage Unit Grid Sampling Locations*) of Attachment G.6 were revised to correctly reflect the number of support structures on Pad 1. The above mentioned figures were revised in a previous permit modification to include a total of 17 transportainers and storage sheds—which were to be situated on the permitted unit to serve as storage for tools and equipment. Only 16 containers were moved to the permitted unit; therefore, the additional storage structure has been removed from the revised figures.

The title for Figure G.6-1, *Technical Area 54, Area G, Pad 1 Outdoor Container Storage Unit Grid Sampling Location,* which was inadvertently removed during a previous permit modification, was also added to the figure.

Attachment G.6 (*Technical Area 54, Area G, Pad 1, Outdoor Container Storage Unit Closure Plan*), Section 2.0 was also revised to correctly reflect the number of support structures on Pad 1. The language in Section 2.0 previously stated “A total of 17 transportainers and storage sheds, which are used for the storage of tools and equipment, are also located on the permitted unit.” The language in this section has been changed to “A total of 16 transportainers and storage sheds, which are used for the storage of tools and equipment, are also located on the permitted unit.”

Pad 10

Figure 31 (*TA-54, Area G, Pad 10*) of Attachment N and Figure G.11-1 (*Technical Area 54, Area G, Pad 10 Outdoor Container Storage Unit Sampling Grid and Additional Sampling Locations*) of Attachment G.11 were revised to reflect the removal of a polygon/structure shown to be located at the north west corner of Pad 10, overlapping the permitted unit boundary. This polygon, which is an artifact from an outdated map layer, does not represent any existing structures/objects on the Pad.

The title for Figure G.11-1, *Technical Area 54, Area G, Pad 10 Outdoor Container Storage Unit Sampling Grid and Additional Sampling Locations,* which was inadvertently removed during a previous permit modification, was also added to the figure.

Pad 11

Figure 36 (*Technical Area (TA)-54, Area G, Pad 11*) of Attachment N and Figure G.12-1 (*Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Grid Sampling and Additional Sampling Locations*) of Attachment G.12 were revised to accurately reflect the location and orientation of a restroom trailer that is located on Pad 11. Figure 36 and Figure G.12-1 currently show the restroom trailer as being oriented in the north-south direction; however, the restroom trailer is situated on the permitted unit in the east-west direction. The above mentioned figures have been updated to reflect this change.

Figure 36 and Figure G.12-1 were also revised to reflect the addition of a transportainer to the east Dome 375. This structure is situated on the permitted unit to serve as storage for tools and equipment; it will not be used to store or manage hazardous waste.

Attachment G.12 (*Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Closure Plan*), Section 2.0 was revised to include a discussion of the transportainer on Pad 11. The language that was added to Section 2.0 is as follows: “A transportainer that is used for the storage of tools and equipment, not for management of hazardous waste, is also located on the Pad, east of Dome 375.”

Dome 33

Figure 35 (*Technical Area (TA-54, Area G, Building 33*) of Attachment N and Figure G.14-1 (*Technical Area 54, Area G, Building 33, Indoor Container Storage Unit Grid Sampling and Additional Sampling Locations*) of Attachment G.14 were revised to remove structure 481, which was erroneously depicted as being located northwest of the permitted unit. Structure 481, a support structure that is not associated with hazardous waste management at a permitted unit, is located within the permitted boundary of Pad 6 and is accurately depicted in the figures associated with that permitted unit.

An additional revision to Figure G.14-1 includes the removal of structure 377. This structure was relocated to Pad 1 in a previous permit modification; however, the polygon representing the structure in its original location was never removed.

Figure 8 - Technical Area 54, Area G, Security Fences, Entry Gates, and Entry Stations

Figure 8 (*Technical Area 54, Area G, Security Fences, Entry Gates, and Entry Stations*) of Attachment N was revised to reflect the removal of Dome 224 at Technical Area 54, Area G, Pad 5. A Class 1 permit modification request to remove Dome 224 from the Los Alamos National Laboratory Hazardous Waste Facility Permit was approved by the New Mexico Environment Department on January 20, 2017. Figure 8 of Attachment N has been revised to reflect this change.

Additional changes to Figure 8 include the removal of two structures: TA-54-0497 Real-time Radiography System #2 (RTR2) and TA-54-0506 Canberra Multi-Channel Scaling High Efficiency Neutron Counter (MCS HENC) from Technical Area 54, Area G, Pad 10. A Class 1 permit modification request to remove these structures from the Los Alamos National Laboratory Hazardous Waste Facility Permit was approved on October 24, 2016.

Pad 6

Figure 33 (*Technical Area (TA)-54, Area G, Pad 6, (Domes 153 & 283)*) of Attachment N and Figure G.9-1 (*Technical Area 54, Area G, Pad 6 Outdoor Container Storage Unit Sampling Grid and Additional Sampling Locations*) of Attachment G have also been revised to reflect the removal of Dome 224 at Technical Area 54, Area G, Pad 5.

Figure 27 - Technical Area 54, Area G, Container Storage Units

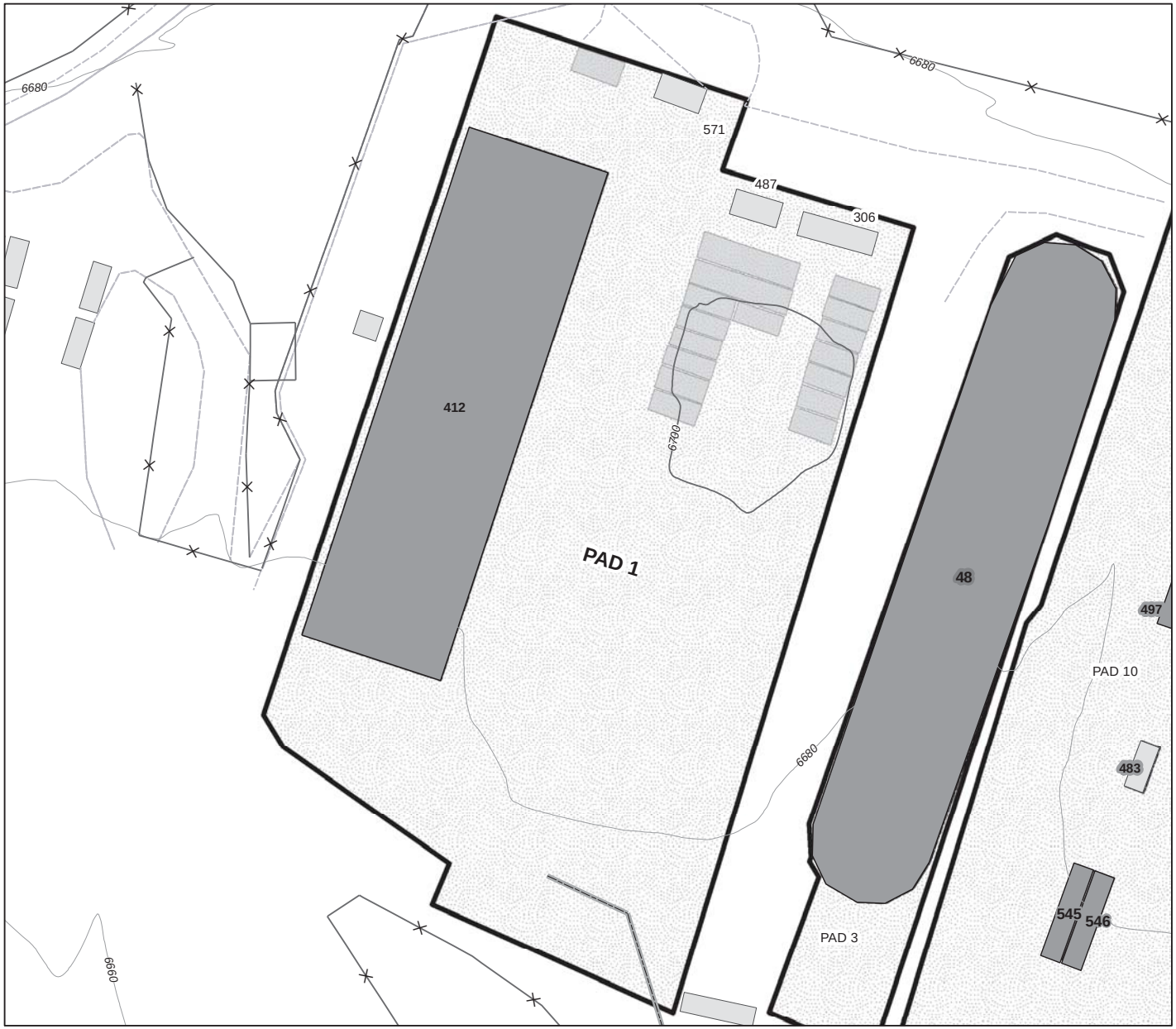
Figure 27 (*Technical Area 54, Area G, Container Storage Units*) of Attachment N was revised to reflect the relocation of structures located on permitted units throughout TA-54, Area G—which were included in previous permit modifications but were not updated on Figure 27. To remain consistent with previous figure updates, the following changes have been made to Figure 27:

- On Pad 1, a revision was made to correctly reflect the number of support structures. As was mentioned above, a previous permit modification included a total of 17 transportainers and storage sheds to be situated on the permitted unit; however, only 16 containers were moved. The polygon representing the additional storage structure has been removed.
- On Pad 10, a revision was made to reflect the removal of a storage trailer from outside the southern boundary of the permitted unit. A previous permit modification included the relocation of storage trailer 54-484 from just outside the southern boundary of the permitted unit to the inside of the permitted boundary. Although the current location of the storage trailer was updated, the polygon representing the previous location was not removed from Figure 27.
- Additional revisions were made to reflect the removal of storage shed 574 from Pad 9 and storage trailer 377 from north of Dome 33. These structures were relocated to Pad 1

in a previous permit modification, but the polygons representing the previous/original locations were not removed.

Attachment 1

Pages of the replacement figures for Attachments N, G.6, G.9, G.11, G.12 and G.14 and text revisions for Attachments G.6 and G.12



Legend

Buildings/Structures
(not associated with the permitted unit)

RCRA Waste Management Units (RWMU)
Category

RWMU

Structure

Fire Protection Drain Lines

Contours, 100 ft

Contours, 20 ft

Roads, dirt

Fences

Feet
0 25 50 100

0 4.75 9.5 19
Meters

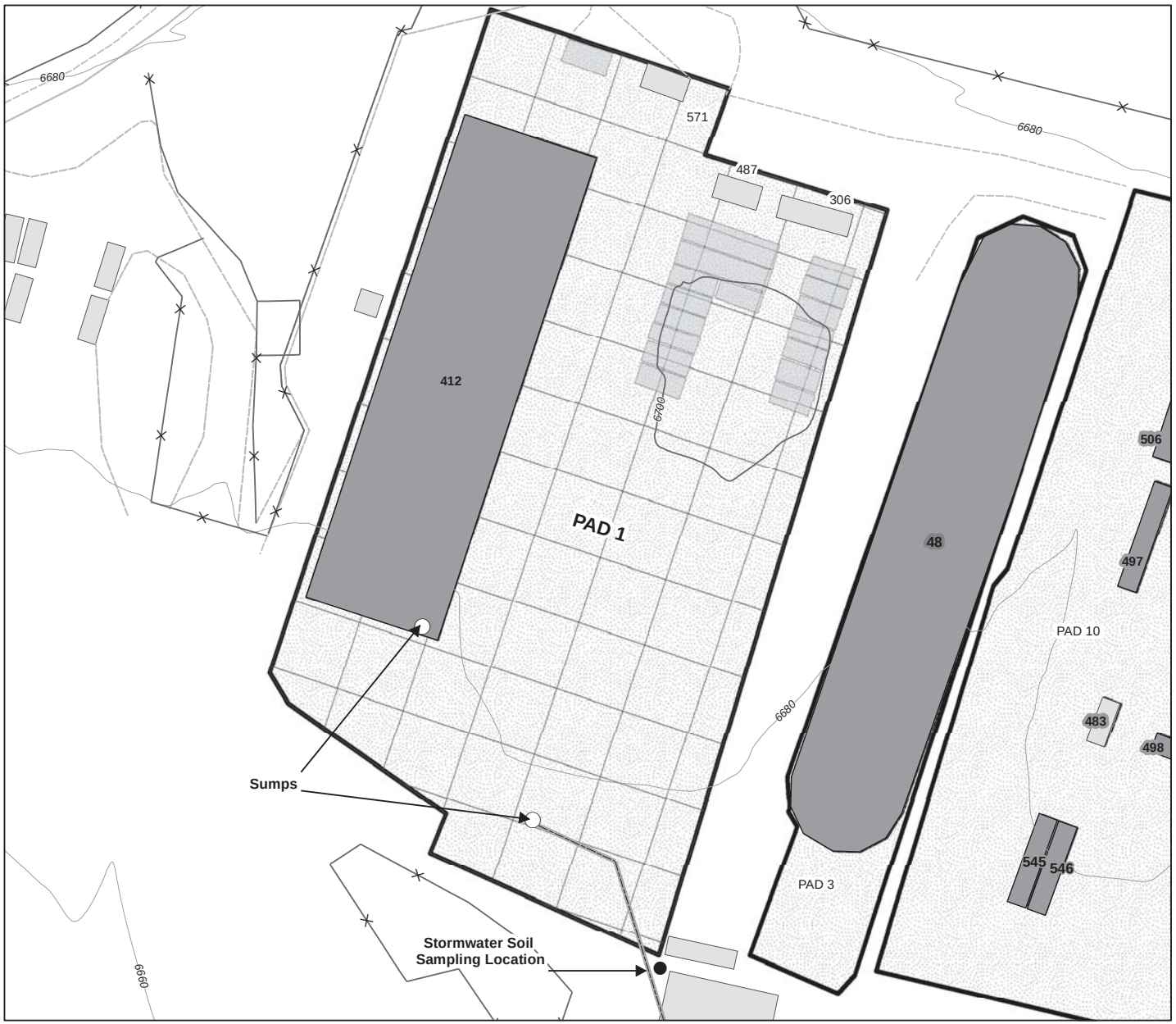
N

Map Produced by Ben Sutter, ADBI-SI.
Date: March 20, 2017.
Map Number 17-0020-03-Pad1-General.

NAD 1983 StatePlane New Mexico Central FIPS 3002 (US Feet)

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.

Figure 29: TA-54, Area G, Pad 1



Permitted Unit Soil Sampling Grid

Legend

- Buildings/Structures (not associated with the permitted unit)
- RCRA Waste Management Units (RWMU) Category
  - RWMU
  - Structure
- Sample grid (cell size = 900 sqft)
- Additional Sampling Locations
- Sumps
- Fire Protection Drain Lines
- Contours, 100 ft
- Contours, 20 ft
- Roads, dirt
- Fences

Feet
0 25 50 100

0 4.75 9.5 19
Meters

N

Map Produced by Ben Sutter, ADBI-SI.
Date: March 20, 2017.
Map Number 17-0020-04-Pad1.

NAD 1983 StatePlane New Mexico Central FIPS 3002 (US Feet)

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..

Figure G.6-1: Technical Area 54, Area G, Pad 1 Outdoor Container Storage Unit Grid Sampling Locations

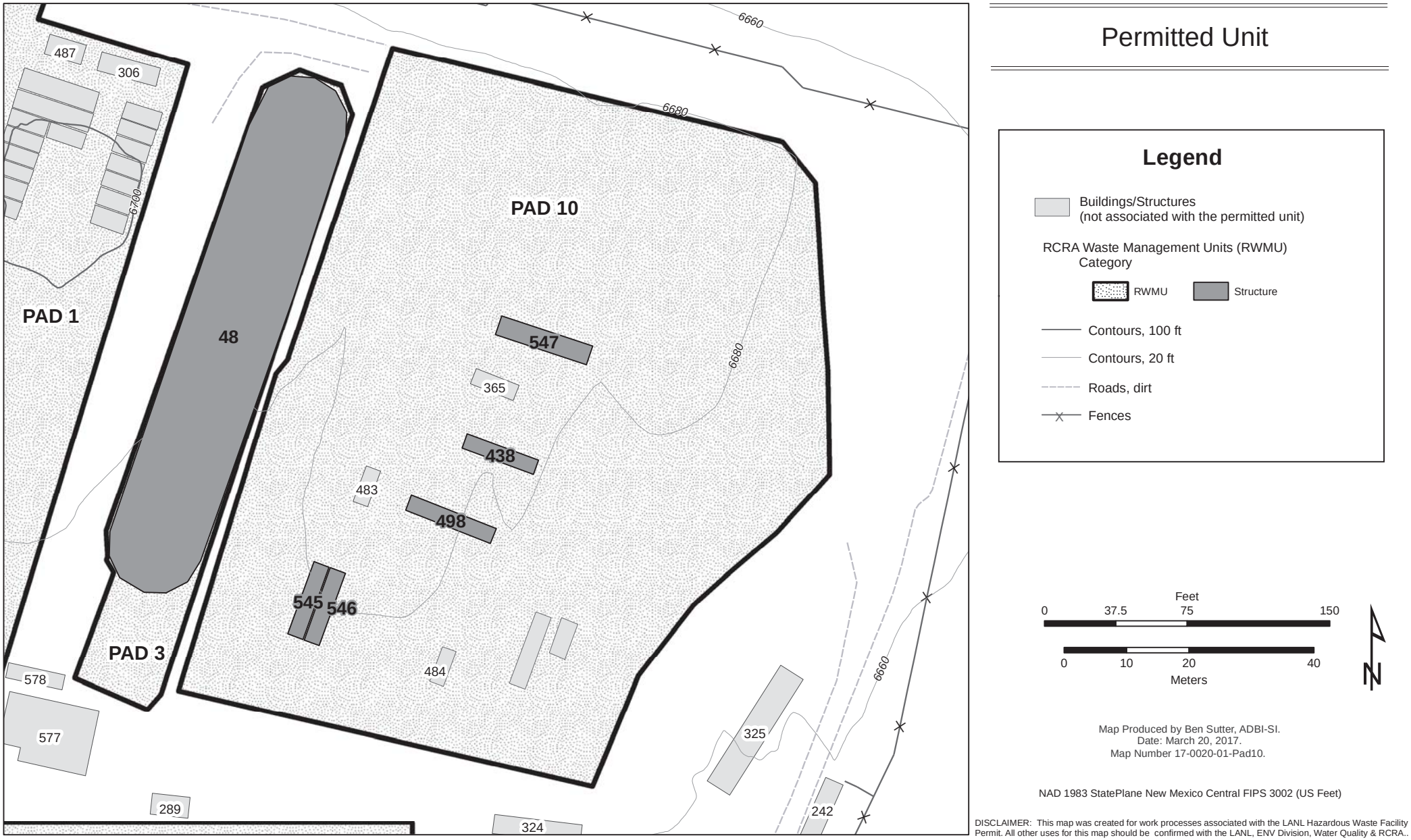
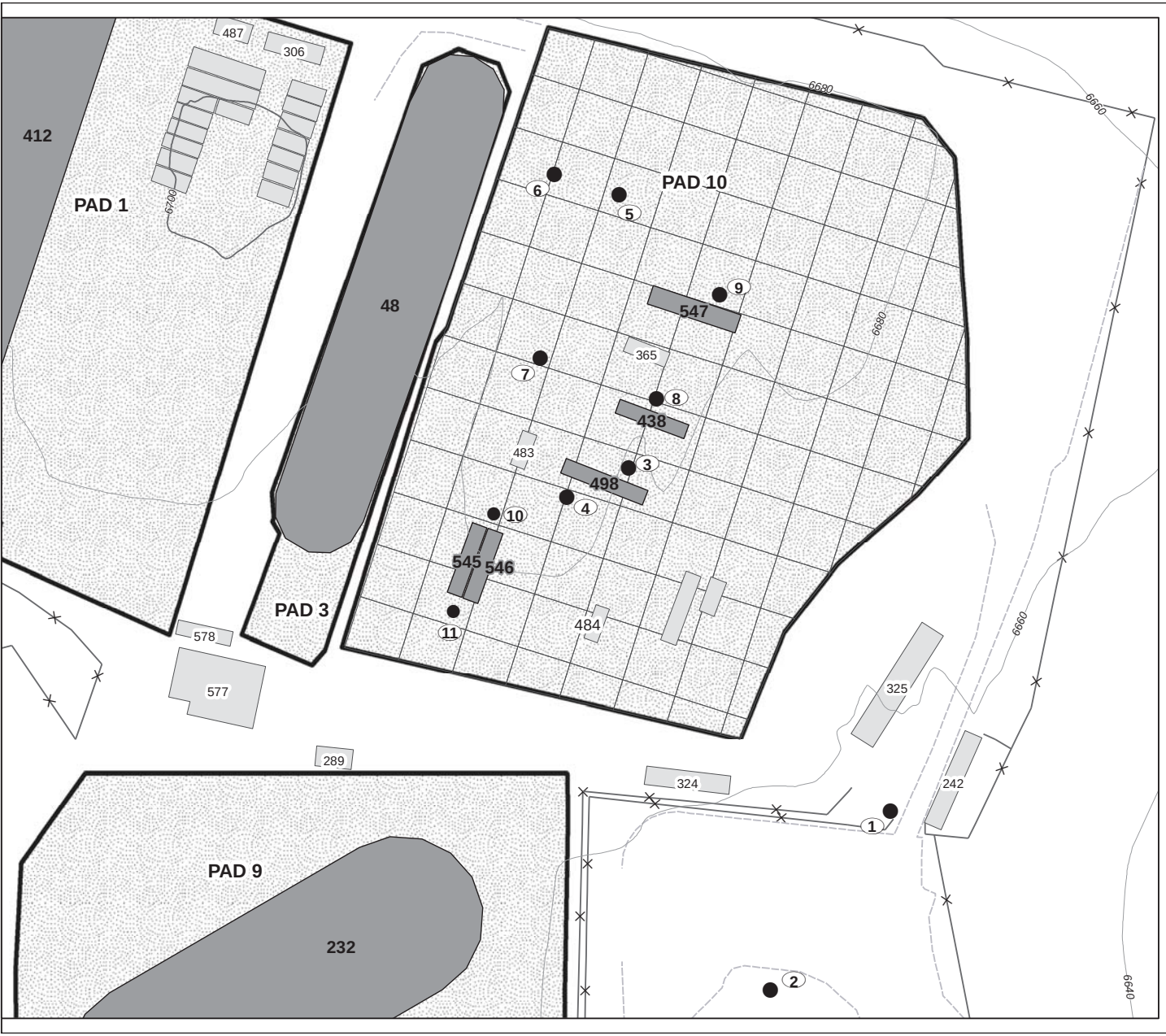


Figure 31: TA-54, Area G, Pad 10



Permitted Unit Soil Sampling Grid

Legend

- Additional Sampling Locations
- Buildings/Structures (not associated with the permitted unit)
- RCRA Waste Management Units (RWMU) Category
  - RWMU
  - Structure
- Sample grid (cell size = 900 sqft)
- Contours, 100 ft
- Contours, 20 ft
- Roads, dirt
- Fences

N

1:750

Feet
0 40 80 160

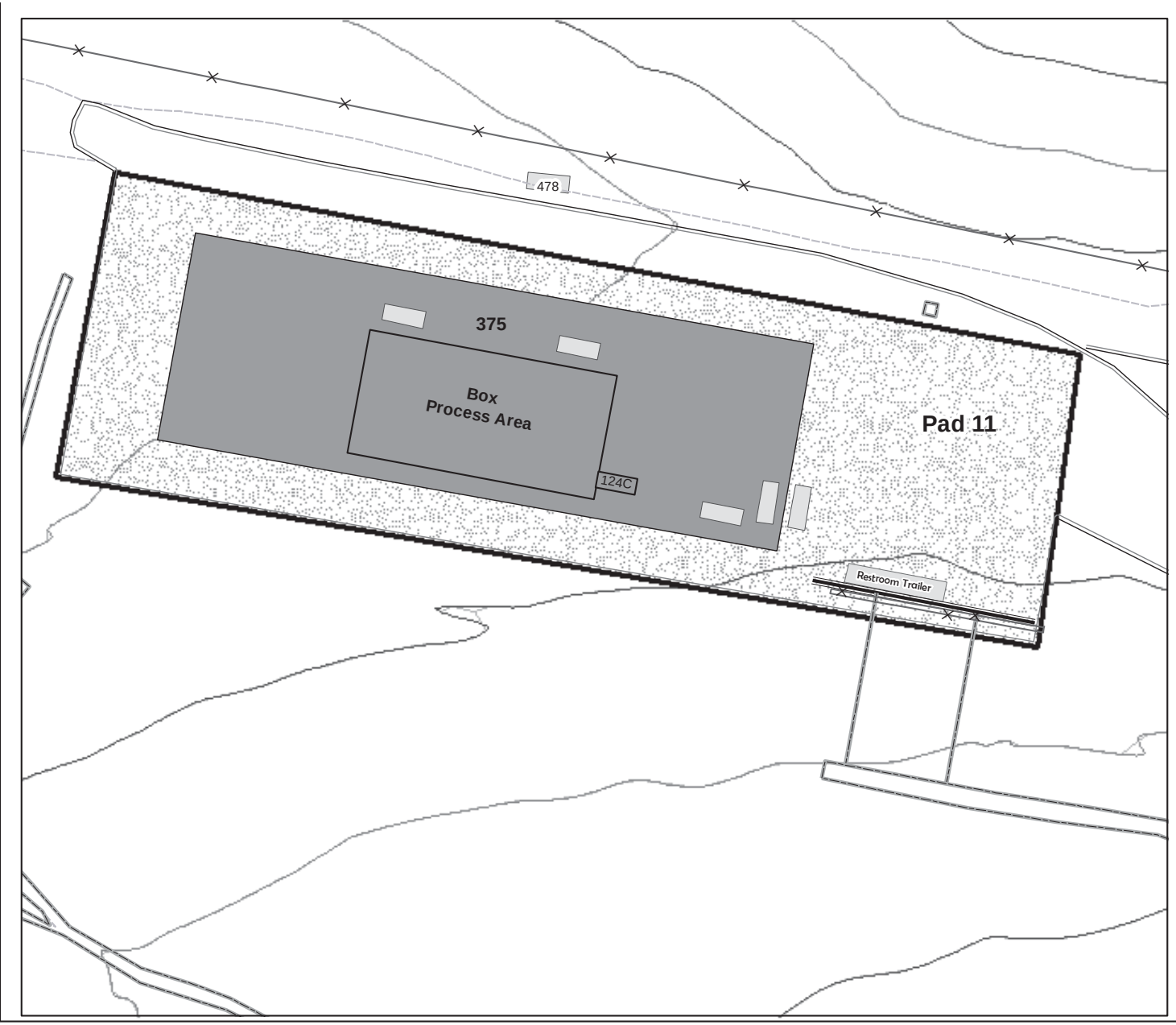
0 10 20 40
Meters

State Plane Coordinate System New Mexico, Central Zone, US Feet
NAD 1983 Datum

Map Produced by Ben Sutter, ADBI-SI.
Date: March 20, 2017.
Map Number 17-0020-02-Pad10.

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..

G.11-1: Technical Area 54, Area G, Pad 10 Outdoor Container Storage Unit Sampling Grid and Additional Sampling Locations



Permitted Unit Soil Sampling Grid

Legend

- Buildings/Structures (not associated with the permitted unit)
- RCRA Waste Management Units (RWMU) Category
  - RWMU
  - Structure
- Drain Lines
- Drain
- Contours, 20 ft
- Roads. paved
- Roads, dirt
- Fences

N

1:650

Feet
0 40 80 160

0 10 20 40
Meters

State Plane Coordinate System New Mexico, Central Zone, US Feet
NAD 1983 Datum

Map Produced by Ben Sutter, ADBI-SI.
Date: March 20, 2017.
Map Number 17-0020-05

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..

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

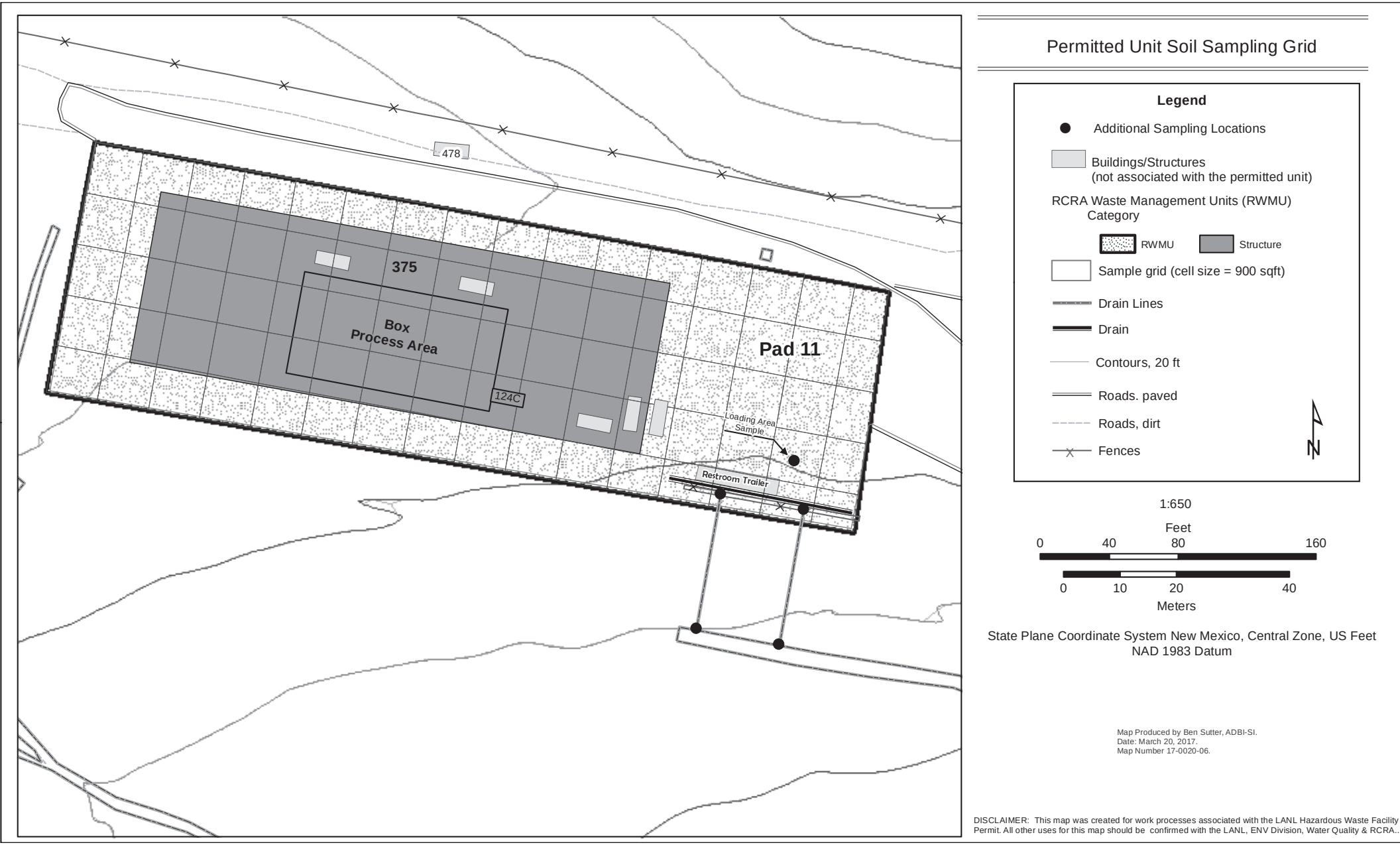
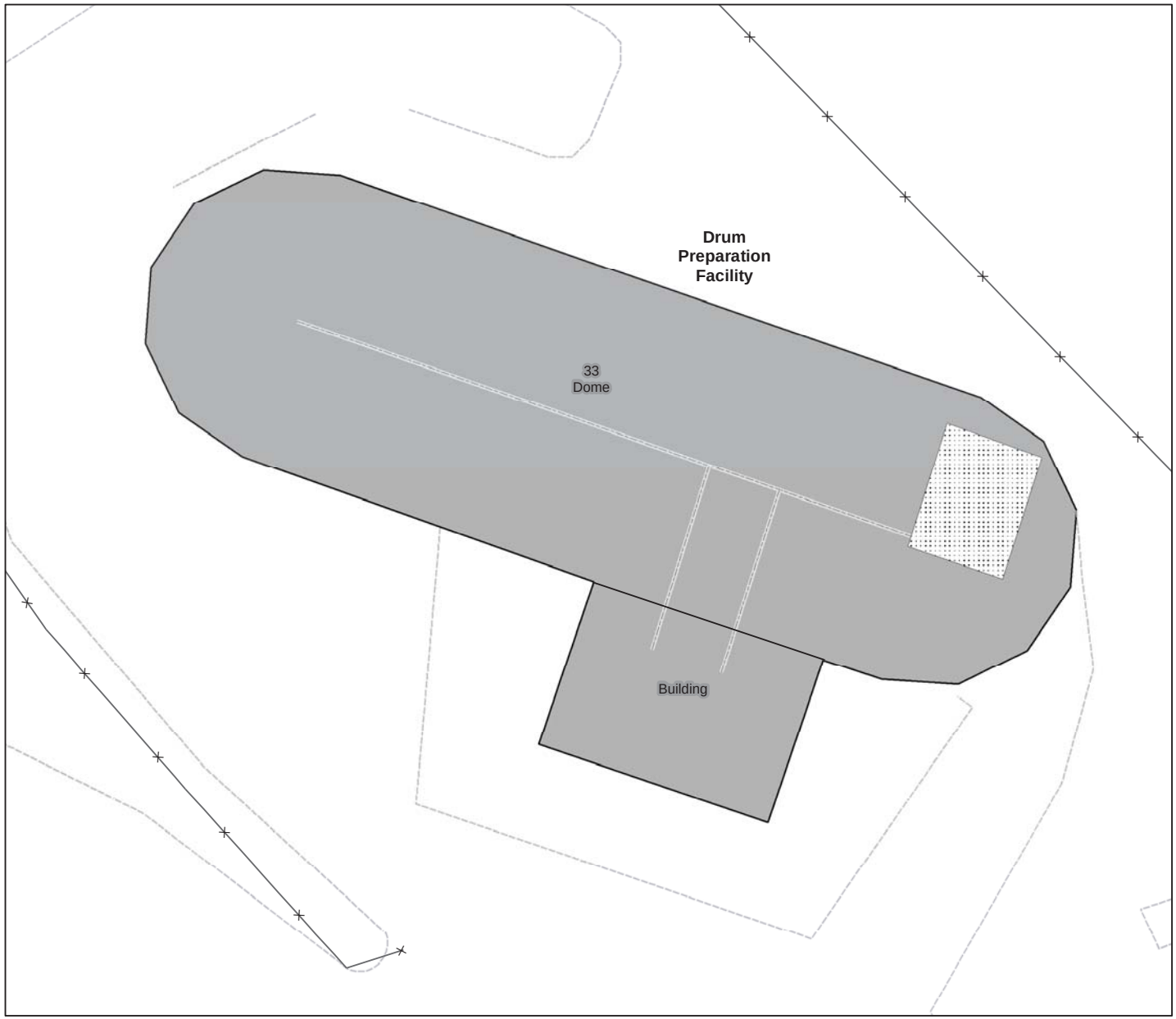


Figure G.12-1: Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Grid Sampling and Additional Sampling Locations



Legend

Sumps*

Buildings/Structures
(not associated with the permitted unit)

RCRA Waste Management Units (RWMU)
Category

RWMU

Structure

Drain Lines*

Contours, 100 ft

Contours, 20 ft

Roads. paved

Roads, dirt

Fences

** Location and size are approximate.*

Feet
0 12.5 25 50
0 4.25 8.5 17
Meters

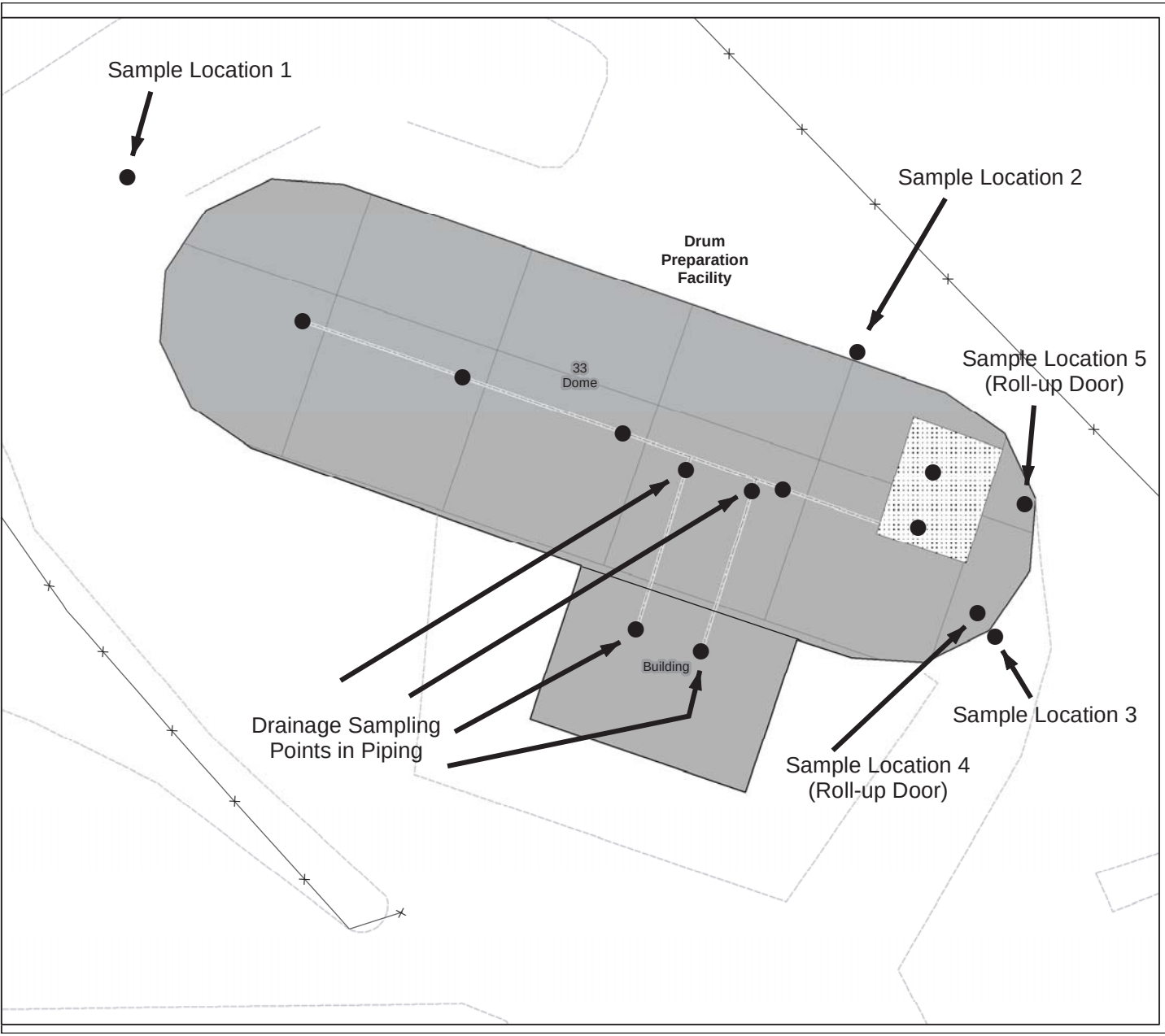
N

Map Produced by Ben Sutter, ADESH-OIO.
Date: March 20, 2017.
Map Number 17-0020-07-Building33_2.

NAD 1983 StatePlane New Mexico Central FIPS 3002 (US Feet)

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..

Figure 35
Technical Area (TA)-54, Area G, Building 33



Permitted Unit Soil Sampling Grid

Legend

- Additional Sampling Locations
- Sumps*
- Buildings/Structures (not associated with the permitted unit)
- RCRA Waste Management Units (RWMU) Category
  - RWMU
  - Structure
- Sample grid (cell size = 900 sqft)
- Drain Lines*
- Contours, 100 ft
- Contours, 20 ft
- Roads. paved
- Roads, dirt
- Fences

* Location and size are approximate.

N

1:243

Feet
0 15 30 60

0 4.5 9 18
Meters

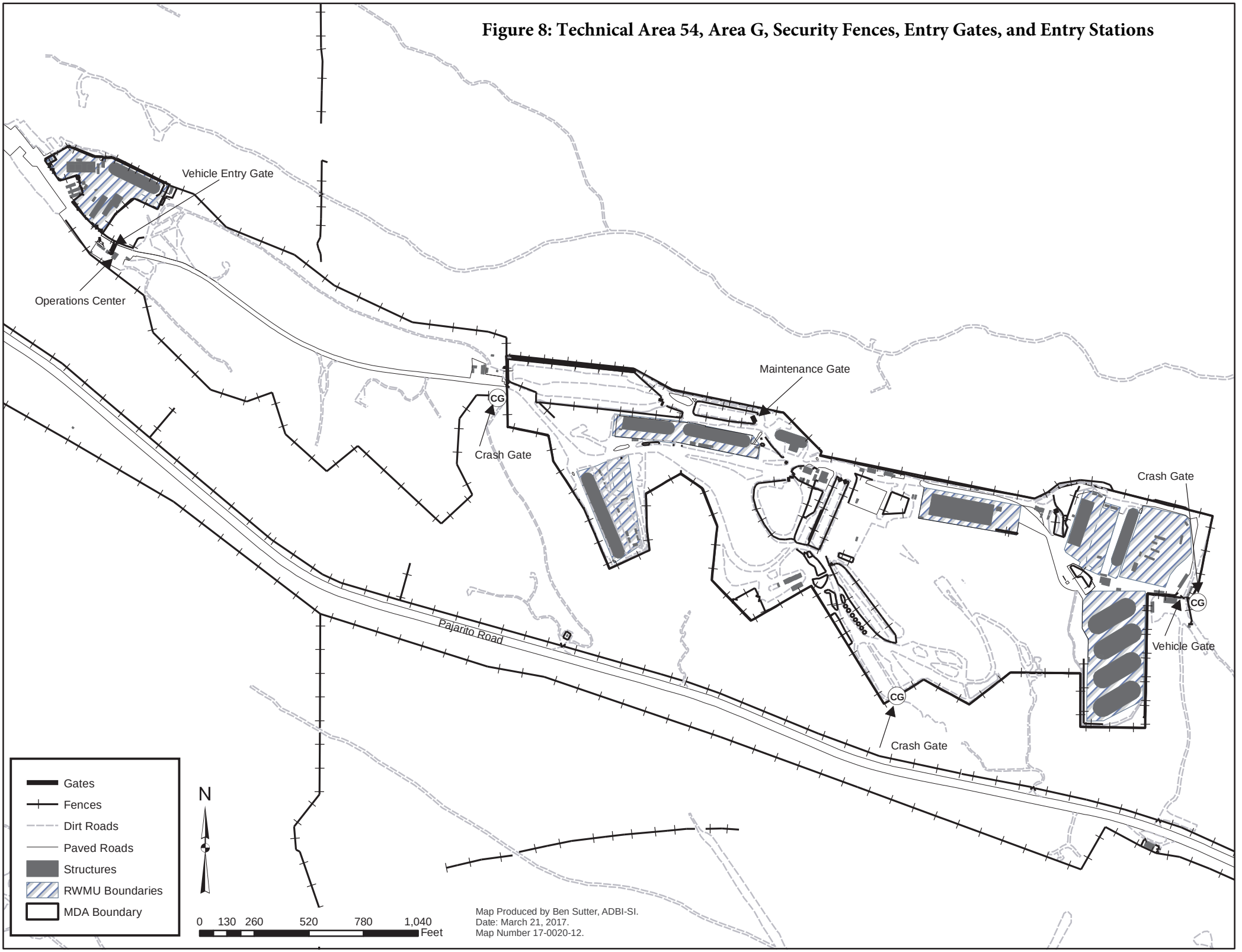
State Plane Coordinate System New Mexico, Central Zone, US Feet
NAD 1983 Datum

Map Produced by Ben Sutter, ADBI-SI.
Date: March 21, 2017.
Map Number 17-0020-11.

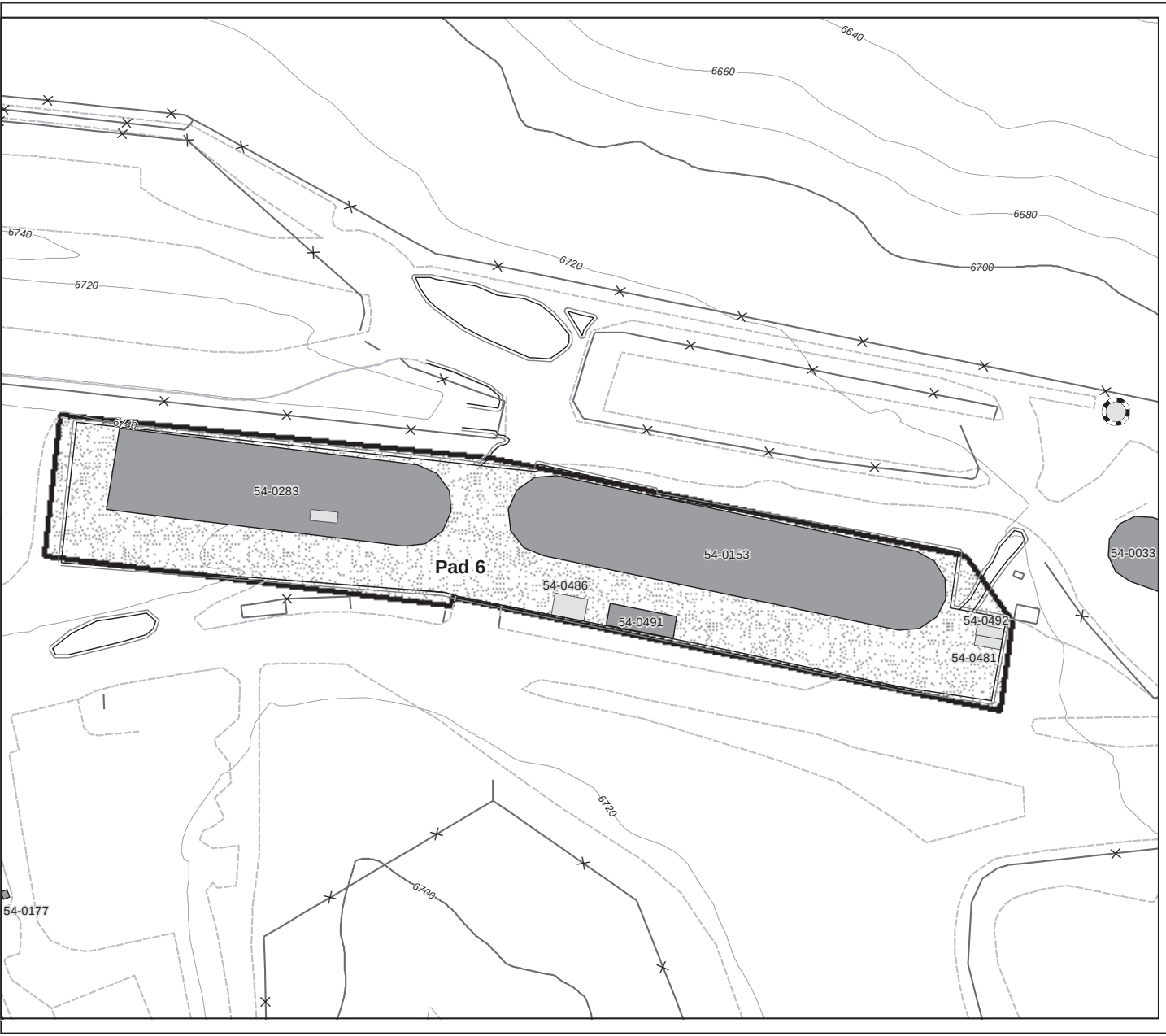
DISCLAIMER: This map was created for work processes associated with the LANL Hazardous Waste Facility Permit. All other uses for this map should be confirmed with the LANL, ENV Division, Water Quality & RCRA..

Figure G.14-1: Technical Area 54, Area G, Building 33, Indoor Container Storage Unit Grid Sampling and Additional Sampling Locations

Figure 8: Technical Area 54, Area G, Security Fences, Entry Gates, and Entry Stations



Map Produced by Ben Sutter, ADBI-SI.
Date: March 21, 2017.
Map Number 17-0020-12.



Permitted Unit

Legend

Buildings/Structures
(not associated with the permitted unit)

RCRA Waste Management Units (RWMU) Category

RWMU

Structure

Sediment Trap

Contours, 100 ft

Contours, 20 ft

Roads. paved

Roads, dirt

Fences

N

1:1,000

Feet
0 50 100 200

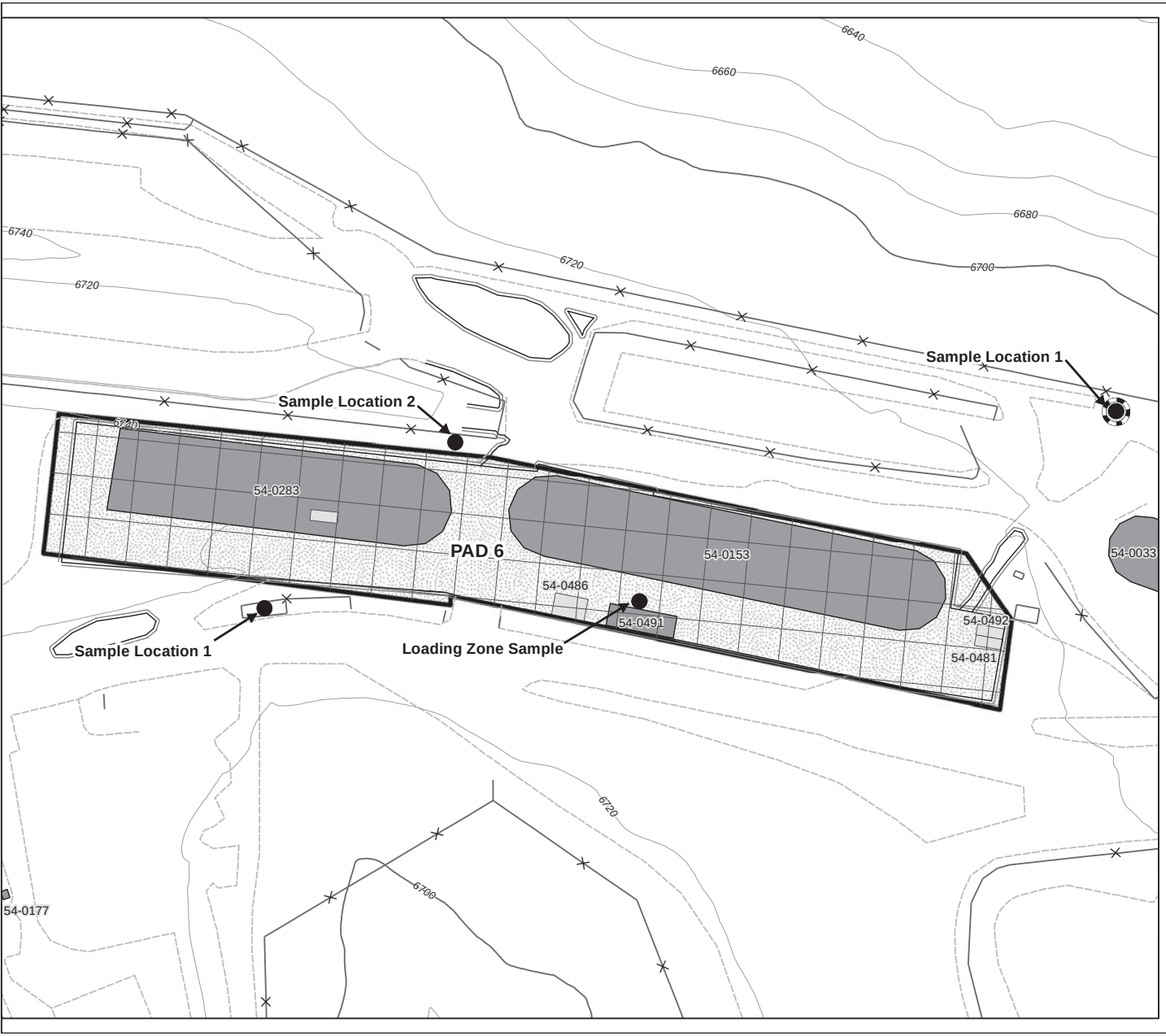
0 12.5 25 50
Meters

State Plane Coordinate System New Mexico, Central Zone, US Feet
NAD 1983 Datum

Map Produced by Ben Sutter, ADBI-SI.
Date: March 20, 2017.
Map Number 17-0020-08.

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..

Figure 33: Technical Area (TA)-54, Area G, Pad 6, (Domes 153 & 283)



Permitted Unit Soil Sampling

Legend

- Additional Sampling Locations
- Buildings/Structures (not associated with the permitted unit)
- RCRA Waste Management Units (RWMU) Category
  - RWMU
  - Structure
- Sample grid (cell size = 900 sqft)
- Sediment Trap
- Contours, 100 ft
- Contours, 20 ft
- Roads. paved
- Roads, dirt
- Fences

N

1:1,000

Feet
0 50 100 200

0 12.5 25 50
Meters

State Plane Coordinate System New Mexico, Central Zone, US Feet
NAD 1983 Datum

Map Produced by Ben Sutter, ADBI-SI.
Date: March 20, 2017.
Map Number 17-0020-09.

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..

Figure G.9-1: Technical Area 54, Area G, Pad 6 Outdoor Container Storage Unit Sampling Grid and Additional Sampling Locations

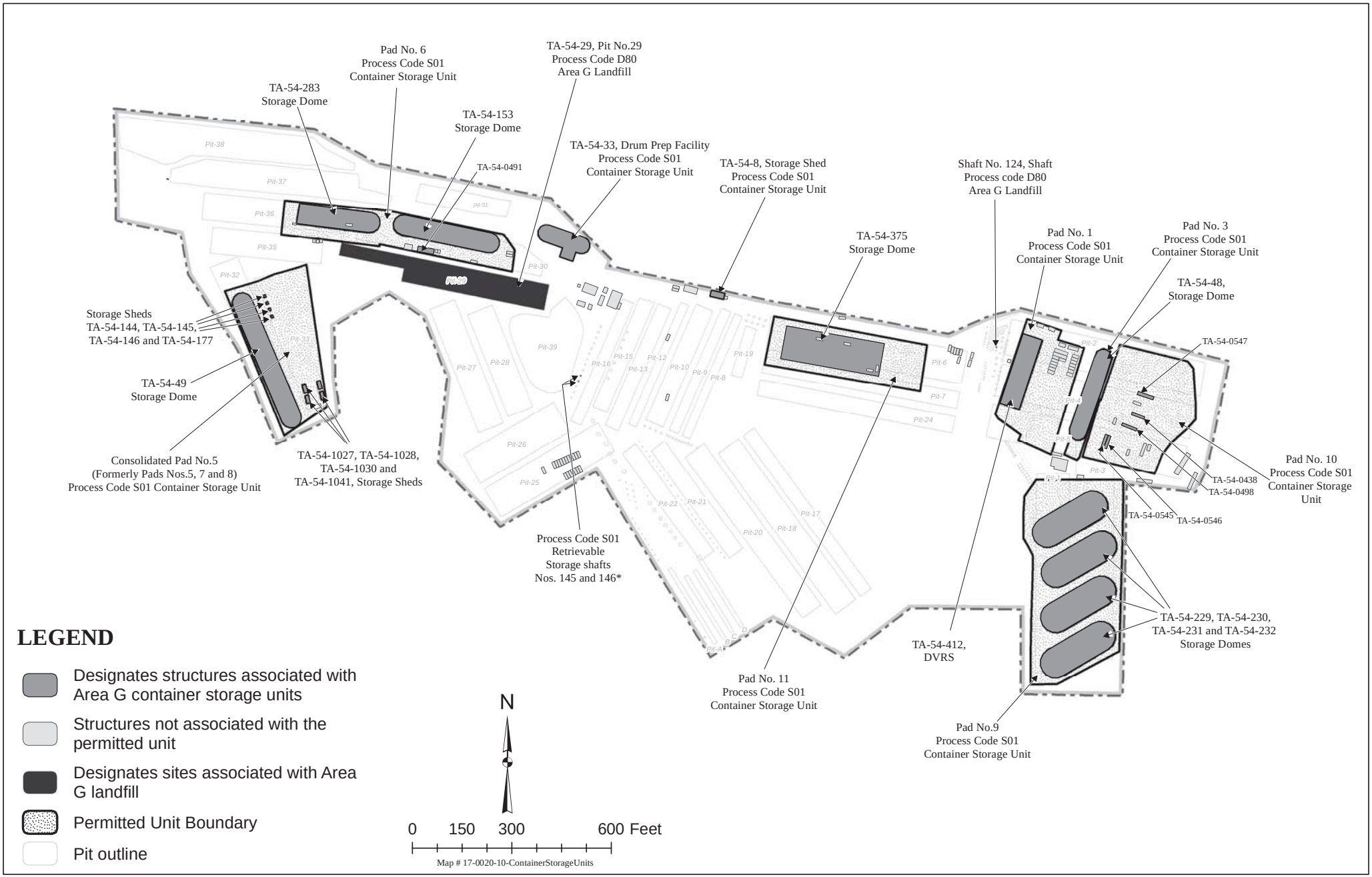


Figure 27: Technical Area 54, Area G, Container Storage Units

ATTACHMENT G.6
TECHNICAL AREA 54, AREA G, PAD 1
OUTDOOR CONTAINER STORAGE UNIT
CLOSURE PLAN

1.0 INTRODUCTION

This closure plan describes the activities necessary to close the outdoor hazardous waste container storage unit at Technical Area (TA)-54, Area G, Pad 1 at the Los Alamos National Laboratory (Facility), hereinafter referred to as the permitted unit. The information provided in this closure plan addresses the closure requirements specified in Permit Part 9 and the Code of Federal Regulations (CFR), Title 40, Part 264, Subparts G and I for hazardous waste management units operated at the Facility under the Resource Conservation and Recovery Act (RCRA) and the New Mexico Hazardous Waste Act.

Until closure is complete and has been certified in accordance with Permit Section 9.5, a copy of the approved closure plan or the hazardous waste facility permit containing the plan, any approved revisions to the plan, and closure activity documentation associated with the closure will be on file with hazardous waste compliance personnel at the Facility and at the U.S. Department of Energy (DOE) Los Alamos Site Office. Prior to closure of the permitted unit, this closure plan may be amended in accordance with Permit Section 9.4.8 to provide updated sampling and analysis plans and to incorporate updated decontamination technologies. Amended closure plans shall be submitted to the New Mexico Environment Department (Department) for approval prior to implementing closure activities.

2.0 DESCRIPTION OF UNIT TO BE CLOSED

A description of the permitted unit can be found in Permit Attachment A (*Technical Area Unit Descriptions*). This section of the closure plan provides a description of the permitted unit which is located in the north-eastern portion of Area G and is comprised of an asphalt pad with the structure (Building 412, the Decontamination and Volume Reduction System (DVRS)) situated on it.

The irregularly-shaped asphalt pad is approximately 358 feet (ft) long and 213 ft wide or approximately 76,000 square feet. The pad, which is sloped 1% to 1.5% to the south and south-east for drainage, consists of a four to six inch (in) layer of asphalt over the underlying base course overlying fill (minimum six inches of tuff). The pad has one structure associated with it, Building 412 (DVRS). Storage of mixed waste occurs on the Pad and in Building 412.

Dome 226, which was decommissioned in October 2009, was located on the eastern portion of the permitted unit. The dome was approximately 286 ft long and 89 ft wide, was built of an aluminum framework of trusses covered with tension-fitted ultraviolet resistant, fire-retardant coated, polyester fabric anchored with bolts to the pad's concrete ring wall and had a surface area of about 22,300 square ft. The interior floor perimeter of the dome was surrounded with a 6-inch-high, 6-inch-wide asphalt curb and was equipped with personnel doors and a roll-up door on the south end for vehicle access. A ramp was located at the vehicle entrance to the dome, which allowed vehicles and container handling equipment to pass safely over the interior curb which prevented run-on into the dome. At the southern end of the dome was a drain connecting to the recessed sump in Pad 9's Dome 229. This fire protection drain system consists of a 10 in. line running southeast from where Dome 226 was located with secondary connecting drains from Domes 232 and 231. The purpose of this drain system was to provide additional fire water collection capacity in the event of an emergency. The sump and drain have been plugged to prevent storm water from entering the system at the drainage point. Building 412 is a one story building that is approximately 220 ft long by 60 ft wide or 13,200 square ft. This building is currently used for storage and volume reduction of bulky mixed waste. It consists of two structures: an internal primary confinement structure that houses mixed waste processing operations; and an external confinement building, which contains the primary confinement structure. The building itself provides protection from the elements and a temperature-controlled space for the internal structures and associated process equipment. There are roll-up vehicle-access loading doors on the north and south ends of the building and personnel access doors on the north, east, and south for support

of operations. The floor and foundation of the building are concrete and the floor is painted with an epoxy sealant. The concrete slab is above grade to direct potential run-on away from the building. The floor in the building is sloped to a sump that has a grating cover to provide traction and a level working surface.

The primary confinement structure is housed entirely within the building and consists of interconnected enclosures. The primary confinement is approximately 150 ft long by 50 ft wide by 16 ft high and sits directly on the sealed concrete floor. The primary confinement interlocks in a self supporting steel framework that can be assembled into multiple configurations. It is equipped with both large roll-up doors so that personnel, equipment, and material can access the primary confinement and move from one enclosure to the next. Equipment in the enclosures includes gloveboxes, dismantling tools (*e.g.*, power saws, hammers, pry bars), shearing and bailing equipment. Building 412 contains fire protection piping as well as heating and ventilation ducting.

The permitted unit has been used for the storage of both liquid and non-liquid mixed waste and has stored the following waste types: solidified inorganic solids; leached process residues; salts and cement paste; ash; dewatered aqueous sludge; chemical treatment sludge; soils; combustible debris (*e.g.*, plastics, rubber, laboratory trash, building debris); and heterogeneous debris.

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 hazardous waste management procedures and hazardous waste constituents stored at the permitted unit.

A total of ~~17~~ 16 transportainers and storage sheds, which are used for the storage of tools and equipment, are also located on the permitted unit. These structures are situated on the permitted unit as support structures and, according to the Facility Operating Record, they have not been used to store hazardous waste.

3.0 ESTIMATE OF MAXIMUM WASTE STORED

Approximately 1,458,500 gallons of hazardous waste has been stored at the permitted unit to date. Throughout the life of this Permit, it is estimated that an additional 1,760,000 gallons of hazardous waste will be stored.

4.0 GENERAL CLOSURE REQUIREMENTS

4.1 Closure Performance Standards

As required by Permit Section 9.2, the permitted unit will be closed to meet the following performance standards:

a. remove all hazardous waste residues and hazardous constituents; and

b. ensure contaminated media do not contain concentrations of hazardous constituents greater than the clean-up levels established in accordance with Permit Sections 11.4 and 11.5. For soils the cleanup levels shall be established based on residential use. The Permittees must also demonstrate that there is no potential to contaminate groundwater.

If the Permittees are unable to achieve either of the clean closure standards above, they must:

ATTACHMENT G.12
TECHNICAL AREA 54, AREA G, PAD 11
OUTDOOR CONTAINER STORAGE UNIT
CLOSURE PLAN

1.0 INTRODUCTION

This closure plan describes the activities necessary to close the outdoor hazardous waste container storage unit at Technical Area (TA)-54, Area G, Pad 11 at the Los Alamos National Laboratory (Facility), hereinafter referred to as the permitted unit. The information provided in this closure plan addresses the closure requirements specified in Permit Part 9 and the Code of Federal Regulations (CFR), Title 40, Part 264, Subparts G and I for hazardous waste management units operated at the Facility under the Resource Conservation and Recovery Act (RCRA) and the New Mexico Hazardous Waste Act.

Until closure is complete and has been certified in accordance with Permit Section 9.5, a copy of the approved closure plan or the hazardous waste facility permit containing the plan, any approved revisions to the plan, and closure activity documentation associated with the closure will be on file with hazardous waste compliance personnel at the Facility and at the U.S. Department of Energy (DOE) Los Alamos Site Office. Prior to closure of the permitted unit, this closure plan may be amended in accordance with Permit Section 9.4.8, as necessary and appropriate, to provide updated sampling and analysis plans and to incorporate updated decontamination technologies. Amended closure plans shall be submitted to the New Mexico Environment Department (Department) for approval prior to implementing closure activities.

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).

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. Two structures (124B and 124 C) are connected to the modular panel containment structure. The external dimensions of the structures are approximately 20 feet long, 8 feet wide and 8.5 feet high. The structures are refrigeration units, electrically driven, and are constructed of stainless steel internal and external panels. The structures are connected to the roll-up door opening for the modular containment structure, with the doors for each of the units facing into the modular containment structure. There is a restroom trailer (approximately 15 feet long x 8.5 feet wide) on the south eastern portion of Pad 11. A transportainer that is used for the storage of tools and equipment, not for management of hazardous waste, is also located on the Pad, east of Dome 375.

Attachment 2

Certification

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.

4-17-17

John C. Bretzke
Division Leader
Environmental Protection and Compliance Division
Los Alamos National Security, LLC

Date Signed

4-21-2017

Arturo Duran
Permitting and Compliance Manager
Environmental Management
Los Alamos Field Office

Date Signed