State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

February 14, 2018

Doug Hintze, Manager
U.S. Department of Energy
Environmental Management
Los Alamos Field Office
1900 Diamond Drive, M984
Los Alamos, NM 87544

Benjamine B. Roberts, Division Leader
Environmental Protection and Compliance Division
Los Alamos National Laboratory
P.O. Box 1663, MS-K491
Los Alamos, NM 87545

RE: APPROVAL
CLASS 1 PERMIT MODIFICATION REQUEST TO REMOVE A REFRIGERATION UNIT FROM TECHNICAL AREA 54, PAD 11, DOME 375
LOS ALAMOS NATIONAL LABORATORY
EPA ID #NM0890010515
HWB-LANL-18-002

Dear Messrs. Hintze and Roberts:

The New Mexico Environment Department (NMED) has received the United States Department of Energy and Los Alamos National Security, LLC, (collectively, the Permittees) *Transmittal of Class 1 Permit Modification Request to Remove a Refrigeration Unit from Technical Area 54, Pad 11, Dome* 375 dated and received January 18, 2018, and referenced by LA-UR-17-31181/EPC-DO-17-535. The Permittes have submitted this Class 1 Permit Modification Request (PMR) with prior approval seeking to modify unit descriptions and figures in Permit Attachments A, J, G.12 and N which are associated with the removal of the refrigeration unit located in technical area (TA) 54, Pad 11, Dome 375.

NMED has accepted the submittal for review in accordance with the New Mexico Hazardous Waste Permit and Corrective Action Fee Regulations, 20.4.2.201.B(2) and (3) NMAC and has incorporated the proposed modifications into the Permit.

An electronic version of the Permit that incorporates the modifications is enclosed with this letter. The modified Permit is also available on the Department's Hazardous Waste Bureau website https://www.env.nm.gov/hazardous-waste/lanl-permit/.

The New Mexico Hazardous Waste Management Regulation at 20.4.1.901A. (10) NMAC states "A final permit decision shall become effective thirty (30) days after this notice of the decision has been served on the applicant…" The Department has approved this modification on February 14, 2018; hence the effective date of the modification shall be March 16, 2018.

If you have any questions regarding this letter, please contact Siona Briley at (505) 476-6049.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB
N. Dhawan, NMED HWB
M. Schatz, NMED HWB
S. Briley, NMED HWB
L. King, EPA 6PD-N
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File: 2018 LANL TA-54: Approval Letter Class 1 PMR with prior approval
LANL-18-002

ATTACHMENT A

TECHNICAL AREA (TA) - UNIT DESCRIPTIONS

equipped with a badge reader and is locked at all times unless used by authorized personnel for maintenance purposes.

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. There is a restroom trailer (approximately 15 feet long x 8.5 feet wide) on the south eastern portion of Pad 11.

A.4.3 TA-54 West

The two permitted units at TA-54 West include the indoor low bay and the high bay at TA-54-38 and the outdoor storage pad which surrounds the north, east, and south sides of TA-54-38 and the loading dock at TA-54-38. The permitted units at TA-54 West are used to store solid mixed low level and mixed transuranic waste (*see* Figure 37 in Attachment N (*Figures)*).

The permitted units at TA-54-38 West may receive any container that may be stored at the units in accordance with Permit Section 3.3 (e.g. 85-gallon drums, 100-gallon drums, and ten-drum overpacks); however, most often the units receive WIPP-ready 55-gallon drums and SWBs for final preparation and packaging. All waste containers are handled in a manner that will not cause them to rupture.

Waste is generally brought into the TA-54-38 West Outdoor Pad through the south-eastern vehicle gate and placed in storage on the northern portion of the TA-54-38 West Outdoor Pad. At the outdoor unit, waste is not stored in front of gates or within 10 feet of the fence line or within 60 feet of the building. No paved or unpaved roadways are located within 5 feet of the waste storage area. From the outdoor permitted unit, containers are generally moved into the Low Bay at TA-54-38 West and made amenable for placement in a WIPP-compliant shipping container. Normal operations for making the individual waste containers ready for shipment include stretch wrapping 14 drum configurations (or drum payloads) and ratchet strapping SWBs one on top of the other. Generally, these Type A container configurations are then moved by forklift into the High Bay where they are loaded into TRUPACT II Type B shipping containers using a bridge crane.

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. Structure 124 C, a refrigeration unit that was connected to the roll up door opening of the modular panel containment structure, was removed and dispositioned in early 2018. The refrigeration unit measured 20 feet by 8 feet by 8.5 feet and was used for the remediated nitrate salt-bearing waste campaign. 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 the management of hazardous waste, is also located on the Pad, east of Dome 375.

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

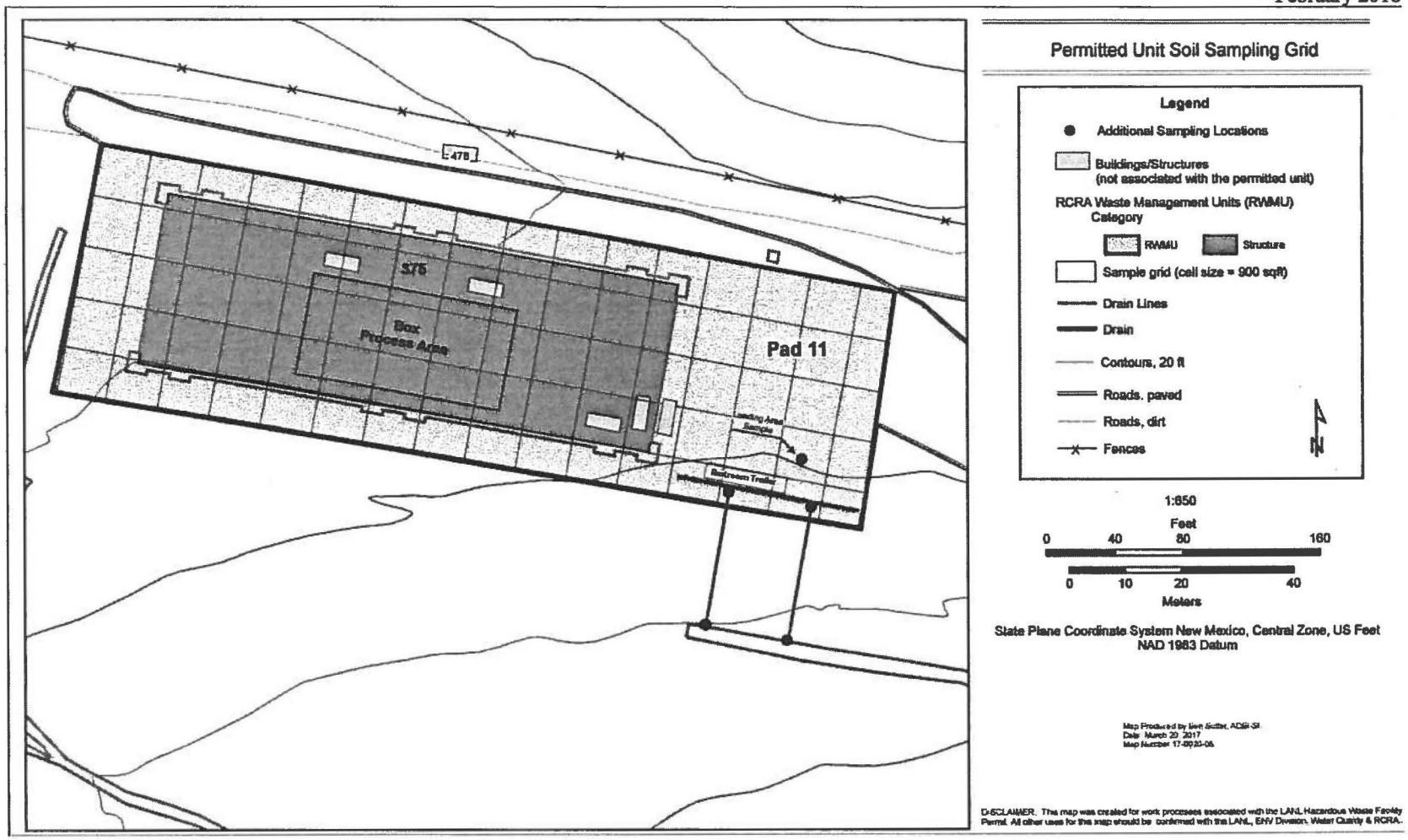

Figure G.12-1: Technical Area 54, Area G, Pad 11 Outdoor Container Storage Unit Grid Sampling and Additional Sampling Locations

ATTACHMENT J

HAZARDOUS WASTE MANAGEMENT UNITS

Unit Identifier	Process Codes	Operating Capacity	General Information	Type of Unit
			144, 145, 146, 177, 1027, 1028, 1030, and 1041 Pad 5 is a consolidation of former Pads 5, 7, and 8. Total square footage – 59,900	a regulated unit)
TA-54 Area G Pad 6	S01	597,300 gal	Includes Storage Domes 153 and 283; and Transportainer 491. Approximately 62,700 square feet	Outdoor (associated with an regulated unit)
TA-54 Area G Pad 9	S01	1,446,720 gal	Includes Storage Domes 229, 230, 231, and 232. Total square footage – 158,000	Outdoor (associated with a regulated unit)
TA-54 Area G Pad 10	S01	159,770 gal	Includes Transuranic (TRU) Waste Characterization Facilities: TA-54-0547 (SuperHENC), TA-54-0498 (LANL HENC), TA-54-0545 and 546 (Storage trailers), and 438. Pad 10 is a consolidation of former Pads 2 and 4. Approximately 89,600 square feet	Outdoor (associated with a regulated unit)
TA-54 Area G Pad 11	S01	682,440 gal	Includes Storage Dome 375. Total square footage – 65,500	Outdoor (associated with a regulated unit)
TA-54 Area G Storage Shed 8	S01	11,880 gal	Also referred to as TA-54-8 Total square footage - 640	Indoor
TA-54 Area G TA-54-33	S01	108,240 gal	Also referred to as Drum Prep Facility Total square footage – 8,570	Indoor

ATTACHMENT N

FIGURES

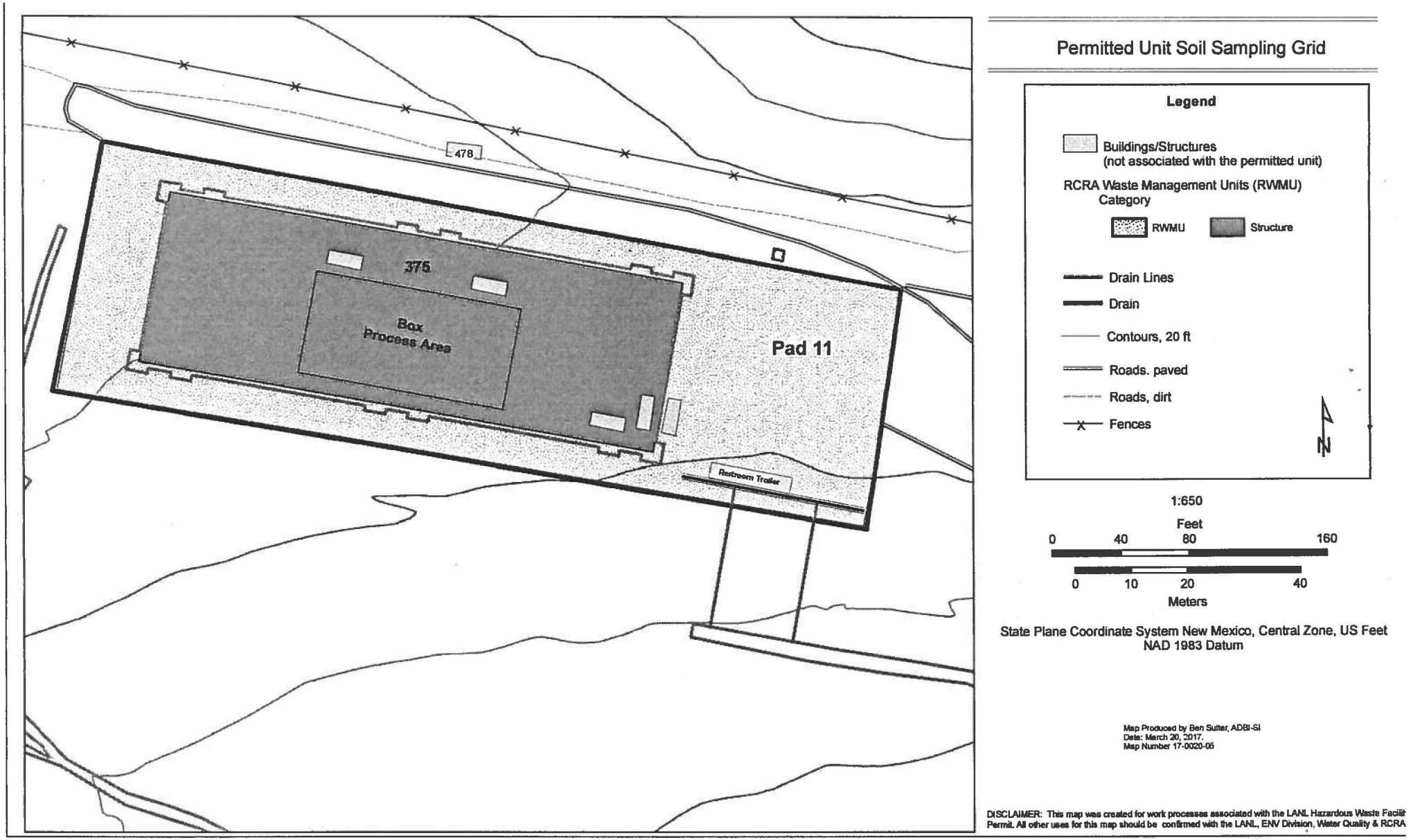

Figure 36: TA-54, Area G, Pad 11