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Date: MAR 0 9 2020
Symbol: EPC-DO: 20-074
LA-UR: 20-22103
Locates Action No.:

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

Subject: **Withdrawal and Resubmittal of a Temporary Authorization Request for Waste Treatment, Storage, and Repackaging, Los Alamos National Laboratory Hazardous Waste Facility Permit, EPA ID# NM0890010515**

Dear Mr. Pierald:

The purpose of this letter is to withdraw and resubmit a request for approval by the New Mexico Environment-Hazardous Waste Bureau (NMED-HWB) for a Temporary Authorization Request to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (the Permit). The Permit authorizes the U.S. Department of Energy (DOE), Triad National Security, LLC (Triad), and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) to manage, store, and treat hazardous waste at LANL. DOE and Triad, collectively known as the Permitees, requested approval for a Temporary Authorization to support the processing (venting, sorting, segregation, and repackaging) of four Flanged Tritium Waste Containers (FTWCs) to meet DOT requirements. The modification was drafted in accordance with Title 40 of the Code of Federal Regulations (40 CFR) § 270.42(e)(3) and submitted to the NMED-HWB on June 18, 2019.

The withdrawal and resubmittal of this permit modification request provides additional pressure mitigation activity locations and provides an opportunity to address comments received from the NMED-HWB during a site visit on February 20, 2020.

Enclosure 1 contains the temporary authorization request, with a detailed explanation and supporting documentation. DOE/Triad believe that the request fully meets all applicable requirements of 40

CFR § 270.42(e)(2)(i)(A), and is consistent with Environmental Protection Agency (EPA) guidance which specifies that temporary authorizations are appropriate to "address a one-time or short-term activity at a facility for which the full permit modification process is inappropriate," (see 53 Fed. Reg. 37912, 37919; Sept. 28, 1988). Enclosure 1 was modeled according to the format and content requirements for a Class 2 permit modification request. DOE/Triad propose to complete processing of the four FTWCs within the 180-day time frame. DOE/Triad have made every effort to ensure that the information provided is appropriate and sufficient for an NMED-HWB decision approving the temporary authorization under 40 CFR § 270.42(e)(3).

Enclosure 2 provides a draft public notice. Notice of this temporary authorization request will be sent to the NMED-HWB maintained LANL facility mailing list and local and state agencies within seven days of submitting this request, in accordance with 40 CFR § 270.42(e).

If you have questions or comments concerning this withdrawal and resubmittal, please contact Karen E. Armijo, DOE, at (505) 665-7314, or Patrick L. Padilla, Triad, at (505) 667-3932.

Sincerely,

for

Jennifer E. Payne
Division Leader
Environmental Protection & Compliance Division
Triad National Security, LLC

Sincerely,

Karen E. Armijo
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

JEP/KEA/PLP:

Enclosure: 1) Temporary Authorization Request- Waste Treatment, Storage, and Repackaging of Flanged Tritium Waste Containers
2) Draft Public Notice

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Bureau

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Dear Mr. Pierald:

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The withdrawal and resubmittal of this permit modification request provides additional pressure mitigation activity locations and provides an opportunity to address comments received from the NMED-HWB during a site visit on February 20, 2020.

Enclosure 1 contains the temporary authorization request, with a detailed explanation and supporting documentation. DOE/Triad believe that the request fully meets all applicable requirements of 40

ENCLOSURE 1

Temporary Authorization Request-Waste Treatment, Storage, and Repackaging of Flanged Tritium Waste Containers

EPC-DO: 20-074

LA-UR-20-22103

Date: MAR 0 9 2020

Temporary Authorization Request
Waste Treatment, Storage, and Repackaging
of
Flanged Tritium Waste Containers

LA-UR-20-22103

March 2020

Los Alamos, New Mexico 87545

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1.0 INTRODUCTION

The Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (hereinafter referred to as "the Permit") was issued in November 2010 by the New Mexico Environment Department. The Permit authorizes the U.S. Department of Energy (DOE); Triad National Security, LLC (Triad); and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) to manage, store, and treat hazardous waste at LANL. Triad and DOE have prepared this temporary authorization request. As discussed below, the Permittees are requesting approval from the New Mexico Environment Department, Hazardous Waste Bureau (NMED-HWB) for a temporary authorization to approve a short-term treatment, storage, repackaging sort and segregation campaign for mixed hazardous waste at LANL destined for disposal at an off-site facility.

Tritium waste generated at LANL has historically been disposed of on-site at Technical Area (TA)-54 (Area G) using various disposal containers, most recently utilizing the Flanged Tritium Waste Container (FTWC). FTWCs are approximately 35-gallon stainless steel vessels, American Society of Mechanical Engineers (ASME) certified for 300 psi. The FTWCs are placed in an 85-gallon stainless steel Type A drum, intended for permanent burial.

Four FTWCs were packaged at the Weapons Engineering Tritium Facility (WETF) in 2007 and sent to Area G for on-site disposal. During a routine audit, the FTWCs were determined to contain mixed hazardous waste, specifically a very small amount of lead byproduct from fired explosive actuators, or squibs. The lead makes these FTWCs RCRA-regulated waste, and that designation precluded on-site disposal. The FTWCs contain mixed low-level waste (lead residues in spent gas valves), and tritiated wastewater, which is regulated by the Atomic Energy Act. Over time, radiolysis of tritiated water in the containers produces pressurized hydrogen and oxygen gases, derived entirely from the tritium low-level waste within the FTWCs.

Triad personnel identified an off-site repackaging company that would receive, open, segregate the hazardous waste from the nonhazardous waste, and then ship all contents to a permanent disposal site. The analysis for the shipping profile of the four FTWCs identified the potential for a flammable, pressurized mixture of hydrogen and oxygen in the free space in the FTWCs. Dissimilar metals inside the FTWCs can potentially create an ignition source during movement, so controls were implemented at Area G that prohibit access to the FTWC storage area, as well as movement or venting of the FTWC containers. Additionally, the FTWC design does not include any mechanism to release or measure pressure inside the container, as they were intended for permanent disposal only. Currently, there is no established off-site waste disposal path for any existing FTWCs at LANL.

The four FTWCs at Area G pose the greatest challenges for mitigation, and the greatest hazards because of the age, location, and configuration of the contents. LANL personnel plan to expand the design used for the WETF FTWCs to create a system that will vent the FTWCs using the lid port, send the headspace gas through a getter bed to capture available tritium, and then vent the remaining gases through a monitored exhaust system. Once the venting operation is performed the FTWCs will be safe to transport, but they will still be considered RCRA regulated waste, and will not meet DOT regulations nor the waste acceptance criteria for any off-site disposal locations. Treatment by pressure mitigation will occur at TA-54, Area G, Pad 5 which is a permitted storage unit under the LANL Hazardous Waste Facility Permit and TA-16, WETF. The venting will utilize existing infrastructure components with the addition of equipment discussed below. Further processing and repackaging is necessary prior to off-site shipment of this waste for disposal.

1.1 Request for Temporary Authorization

The Permittees are requesting the NMED-HWB approval of a temporary authorization pursuant to 20.4.1.900 NMAC, incorporating 40 CFR § 270.42(e)(2)(i)(A), to conduct a short-term waste treatment (pressure mitigation) at TA-54, Area G and TA-16, WETF and waste storage and repackaging campaign at TA-16, Building 205 (WETF). The temporary authorization is necessary because: (1) the four FTWCs must be mitigated prior to their safe transport to TA-16 by venting at TA-54, Area G prior to shipment, (2) repackaging cannot be performed at TA-54, Area G because it does not have the safety authorizations or infrastructure to perform the required process and (3) the waste cannot be transported to an off-site facility for required processing, because the containers, as stored, do not meet DOT requirements (49 CFR Parts 173 and 178) .

NMED-HWB's temporary authorization rules are specified at 40 CFR § 270.42(e) and require Permittees to submit a request that (1) describes the activities to be conducted; (2) explains why the temporary authorization is necessary; and (3) provides sufficient information to ensure the activity's compliance with 40 CFR Part 264 standards. Further, within seven days of submitting the formal request, the Permittees must notify all persons on the facility mailing list and local and State agencies about the temporary authorization request.

As described below, this temporary authorization request fully meets these criteria. Table 1-1 provides a crosswalk that identifies where each of the temporary authorization request requirements specified in 40 CFR § 270.42(e) is addressed in this document.

1.2 Proposed Activities

The four FTWCs will be vented at TA-54, Area G and will be transported to WETF (without leaving LANL property). The FTWCs will be vented and stored at WETF, and opened to segregate the contents. The lead component of the waste will be repackaged and shipped off-site to a permitted Treatment, Storage, and Disposal (TSD) facility. The remaining tritiated waste will be repackaged and disposed of off-site as radiological non-hazardous waste, and the inner containers generating the volatile atmosphere will be processed at WETF and shipped to Savannah River Site for recycling. It is important to note that once pressure mitigation at Area G has been completed, these FTWCs no longer pose a worker hazard beyond the radiological concerns. Thus, the repackaging activities at WETF will be bounded by the existing procedures and safety basis. See section 2.4 for pressure mitigation activities.

At WETF the lids from the FTWCs will be unbolted and removed using standard hand tools and existing procedures. The RCRA waste components (squibs) will be removed from the FTWCs and placed in a container that meets Permit Section 3.3.

- The repackaged waste and containers must be visually examined by a certified examiner in order to be certified to be shipped to an off-site facility.
- In this campaign, the Permittees will process only the four FTWCs at WETF.

1.3 Need for a Temporary Authorization

The four FTWCs that need to be vented at TA-54 and processed at WETF under the temporary authorization require treatment by venting, storage, sorting, segregation and repackaging. WETF is the only facility equipped to repackage tritium contaminated material, and has the necessary safety and environmental controls for sorting and storage. The requested temporary authorization will allow these activities to be performed in appropriate

locations so that the FTWCs can be safely processed and shipped to an off-site facility. The Permittees intend to complete the project within the 180 days allowed under a temporary authorization.

Due to the limited, one-time and short-term nature of this waste processing campaign, along with the relatively simple nature of the planned waste management activities, this project is appropriate to be approved under the temporary authorization process. The Environmental Protection Agency (EPA) has clarified that a temporary authorization is appropriate to address a "one-time or short-term activity for which the full permit modification process is inappropriate." [see U.S. EPA, *Permit Modifications for Hazardous Waste Facilities*, 53 Fed. Reg. 37912, 37919 (Sept. 28, 1988)].

1.4 Compliance with 40 CFR Part 264 standards

The Permittees have ample information demonstrating that this temporary authorization request will meet the standards under 40 CFR Part 264. As explained in detail below, the Permittees will meet these requirements through the current Permit and specific information provided in this document. The current Permit contains many of the conditions addressing the requirements of the New Mexico Hazardous Waste Act (HWA) and 40 CFR Part 264 that are common to all LANL hazardous waste management units. Table 1-2 provides a list of these regulatory references and the corresponding location for the information addressed in this request. Many of the generally applicable 40 CFR Part 264 standards will be met by managing this project according to all applicable requirements contained in the current Permit, including Part 1 – General Permit Conditions; Part 2 – General Facility Conditions; Part 3 – Storage in Containers; Permit Attachment C – Waste Analysis Plan; Permit Attachment D – Contingency Plan; Permit Attachment E – Inspection Plan; and Permit Attachment F – Personnel Training Plan. Specifics of how each provision will be met are discussed further below.

1.5 Temporary Authorization Objectives

The temporary authorization must achieve at least one of the following objectives specified in 40 CFR § 270.42(e)(3)(ii):

A. To facilitate timely implementation of closure or corrective action activities;
B. To allow treatment or storage in tanks or containers, or in containment buildings in accordance with 40 CFR Part 268;
C. To prevent disruption of ongoing waste management activities;
D. To enable the permittees to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or
E. To facilitate other changes to protect human health and the environment.

This temporary authorization request will specifically achieve the objective specified in 40 CFR § 270.42(e)(3)(ii)(B) above, by allowing processing of these FTWCs by facilitating protection of human health and the environment through segregating the Mixed Low Level Waste (MLLW) and providing a path forward [40 CFR § 270.42(e)(3)(ii)(E)].

Table 1-1 Crosswalk of 40 CFR § 270.42(e) with Temporary Authorization Request

Regulatory Citation (40CFR)	Description of Requirement	Document Location/Comment
Sufficiency Criteria		
40 CFR § 270.42(e)(2)(ii)	Request must include:	
40 CFR § 270.42(e)(2)(ii)(A)	Activities to be conducted	1.2, 2.0 through 2.15
40 CFR § 270.42(e)(2)(ii)(B)	Why it is necessary	1.3
40 CFR § 270.42(e)(2)(ii)(C)	Compliance with 40 CFR Part 264	1.4, Table 1-2
40 CFR § 270.42(e)(2)(iii)	Send a notice to all persons on the facility mailing list	Will be sent within 7 days of temporary authorization request
Approval Criteria		
40 CFR § 270.42(e)(3)	To issue the temporary authorization, NMED must find:	
40 CFR § 270.42(e)(3)(i)	Activities are compliant with 40 CFR Part 264	1.4, Table 1-2
40 CFR § 270.42(e)(3)(ii)	Temporary authorization is necessary to achieve project objectives before action likely on a modification request	1.3
40 CFR § 270.42(e)(3)(ii)(B)	Allows treatment or storage in tanks or containers, or in containment buildings in accordance with 40 CFR Part 268	1.2, 2.0 through 2.15
40 CFR § 270.42(e)(3)(ii)(C)	Prevent disruption of ongoing waste management activities	The sorting, segregating and repackaging of the FTWCs will allow them to be safely processed and shipped to an off-site facility.
40 CFR § 270.42(e)(3)(ii)(E)	Facilitate other changes to protect human health and the environment	Facilitates shipment of the FTWCs to an off-site facility and reduces potential exposures at the facility.

Table 1-2 Compliance with 40 CFR Part 264 Standards - Temporary Authorization Crosswalk

Permit/ Regulatory Citation(40 CFR)	Description of Requirement	Compliance Approach
§ 264.13(b)	Development and implementation of waste analysis plan	The project will comply with Permit Section 2.4 and Permit Attachment C.
§ 264.14	Security	The project will comply with Permit Section 2.5. WETF is a secure facility and meets all security requirements of 40 CFR § 264.14 and the Permit.
§ 264.15(b)	General inspection requirements	The project will comply with Permit Section 2.6 and Permit Attachment E. An inspection program at WETF is in place and in compliance with the operating schedule, recordkeeping, and response action commitments in Permit Attachment E (*Inspection Plan*) and 40 CFR § 264.15(b)(i).
§ 264.174	Container inspections	The project will comply with Permit Sections 2.6 and 3, and Permit Attachment E.
§ 264.15(c),	Inspections, Preparedness and prevention	Any deterioration or malfunction of equipment or structures discovered during an inspection which may lead to an environmental or human health hazard shall be mitigated within 24 hours of discovery of the problem. The Permittees shall immediately implement remedial action where a hazard is imminent or has already occurred (see Permit Section 2.10)
§ 264.16	Personnel Training	WETF personnel have successfully completed all training programs in compliance with the training requirements in Permit Attachment F (*Personnel Training Plan*) of the Permit.
§ 264.17	General requirements for ignitable, reactive, or incompatible wastes	The project will comply with Permit Section 2.8. All wastes to be dispositioned under the temporary authorization will be managed in compliance with the requirements of 40 CFR §§ 264.17, 264.176, 264.177, and 264.198.

Permit/ Regulatory Citation(40 CFR)	Description of Requirement	Compliance Approach
Part 264, Subpart C	Preparedness and prevention	The project will comply with Permit Section 2.10 and Permit Attachment D. For the duration of the temporary authorization, TA-16, Rooms 116 and 122 will be maintained and operated in a manner that minimizes the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous constituent that could threaten human health or the environment (40 CFR § 264.31). The list of equipment available at WETF in Rooms 116 and 122 is in Table 2-1 and meets Permit Section 2.10.1.
§ 264.32(b),	Internal communication and alarm system devices, fire control equipment, spill control equipment, and decontamination equipment	Internal communication and alarm system devices, fire control equipment, spill control equipment, and decontamination equipment included in Table 2-1 in compliance with 40 CFR § 264.32(b)(2).
Part 264, Subpart D	Contingency plan and emergency procedures	The project will comply with Permit Section 2.11 and Permit Attachment D.
§ 264.51(b),	Contingency Plan	The Permittees will immediately implement Permit Attachment D (*Contingency Plan*) if there is an incident (such as a fire, an explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous constituents) unit that threatens human health or the environment
§§ 264.71, 264.72, and 264.76.	Recordkeeping and reporting requirements	The Permittees will maintain operating records, and comply with the recordkeeping and reporting requirements associated with manifests, in accordance with 40 CFR §§ 264.71, 264.72, 264.76 and Permit Sections 1.9 and 2.12.
Part 264, Subpart I	Use and Management of Containers	The FTWCs will be stored and managed in accordance with 40 CFR Part 264, Subpart I, 40 CFR § 264.173, and Permit Section 3. All containers used for repackaging of hazardous

Permit/ Regulatory Citation(40 CFR)	Description of Requirement	Compliance Approach
		wastes during the temporary authorization will be in good condition (e.g., no severe rusting or apparent structural defects) in accordance with 40 CFR § 264.171, and LANL will only use containers that comply with 40 CFR Part 264 Subpart I (*Use and Management of Containers*) for storage of hazardous waste. Only containers made of, or lined with, materials that are compatible with and will not react with the hazardous waste to be sorted, treated and/or repackaged will be used, so that the ability of the container to contain the waste is not impaired (40 CFR § 264.172).
§ 264.175	Secondary containment	No free liquids are planned to be processed during this activity. However, if encountered, secondary containment will be used to store wastes which contain free liquids in compliance with 40 CFR § 264.175 and Permit Section 3.
Part 264, Subpart CC	Air pollutant emissions	40 CFR Part 264 § 264.1080(b)(6) Subpart CC requirements do not apply to mixed low-level waste.
§ 264.112	Amendment of closure plan	The project will comply with Permit Section 9 and Section 5 of this request.
§ 264.178	Closure/containers	The project will comply with Permit Section 9 and Section 5 of this request. A report will be submitted to the Department no later than 60 days after completion of authorized activities, in accordance with 40 CFR § 264.115.

2.0 DESCRIPTION OF ACTIVITIES TO BE CONDUCTED AND COMPLIANCE WITH PART 264 STANDARDS

2.1 Location of Temporary Authorization Activities

Treatment by pressure mitigation will occur at TA-54, Area G, Pad 5, building 1028 which is a permitted storage unit under the LANL Hazardous Waste Facility Permit, and TA-16, WETF. The venting will utilize existing infrastructure components with the addition of equipment discussed below.

The permitted unit at TA-54, Area G, Pad 5 measures 850 feet long and 224 feet wide, and is located in the western portion of Area G. It is four inches thick, is sloped 1-2%, and is comprised of three asphalt pads (Pad 5 and older Pads 7 and 8). There are ten structures associated with the permitted unit: two domes (Domes 224 and 49) and eight sheds (sheds 144, 145, 146, 177, 1027, 1028, 1030, and 1041). Rainwater flow at the permitted unit is directed across the pad by slope and drainage structures (i.e., supplemental check berm, culvert, and sediment traps). Storage Shed 1028, is a prefabricated shed constructed of steel measuring approximately 23 ft long, nine foot wide and 8.5 ft high. The shed is equipped with three sets of double doors on one side of the shed for ease of access and have liquid-tight sumps to prevent runoff and contain any potential leaks or spills. The floor of the shed is constructed of a metal grate that covers the sump areas. Containers are placed directly on the metal grates, which prevents contact with liquids that may have accumulated in the sumps. The interior of the shed and sump is coated with chemically-resistant epoxy paint.

All other storage and repackaging activities under this temporary authorization will take place within the WETF, in Rooms 116 and 122. These rooms are shown on Figure 2-2. TA-16 is located in the southwestern portion of LANL (Figure 2-1). It is situated on a broad mesa that is bounded on the north by Cañon de Valle, on the south by State Road 4 and Bandelier National Monument, and on the west by West Jemez Road (State Road 501) and the Santa Fe National Forest. Elevation ranges from approximately 7,700 feet at the west end of the TA to approximately 6,800 feet at the lower east end. Topography is varied, ranging from steep precipitous canyon walls to sloping mesa tops. WETF is located in the southwest corner of TA-16 (Figure 2-1). It is located on a mesa that drains to the east and south, and that is bordered on the northern side by Cañon de Valle and on the southern side by Water Canyon.

The process will utilize existing infrastructure components at WETF, including the facility tritium monitor system, fire protection system, fume hoods, cranes, etc. Facility radiological control systems will be utilized to manage contamination, primarily portable ventilation devices and fume hoods that are part of the facility ventilation system. The waste components will be removed from the FTWCs, and placed in a container that meets Permit Section 3.3. The drum will be placed in storage at the WETF until shipped off-site for disposal.

2.2 Schedule

This short-term project is expected to take no longer than 180 days to complete. This project is scheduled to tentatively begin on April 17, 2020. The RCRA regulated waste will be shipped off-site for permanent disposal and the non-RCRA regulated items will remain in the facility for further processing and off-site disposal.

2.3 Description of Wastes to be Managed

Waste will be stored in compliance with the existing TA-54, Area G, building 1028 and WETF requirements. The required processing of the FTWC waste consists of 3 constituents: the fired actuators/squibs (the RCRA regulated component), bulk molecular sieve material (non-RCRA), and the inner AL-M1 containers (non-RCRA). There are a total of four FTWC containers that contain the RCRA waste (lead), and the contents are well documented and photographed at the time of packaging. This waste has been maintained in permitted RCRA storage at Area G for several years; therefore, this project will not increase LANL's RCRA-permitted storage capacity. The repackaged waste and containers must be visually examined by a certified examiner in order to be certified to be shipped to an off-site disposal location, and none of the containers to be processed contain free liquids. WETF will process only those waste items that can be managed within the approved safety basis for the facility.

2.4 Pressure Mitigation Activities at TA-54, Area G and TA-16, WETF

Pressure mitigation activities will take place at TA-54, Area G, inside and outside of building 1028; and at TA-16, inside and outside of the WETF. The FTWC headspace gas contains hydrogen, oxygen, and tritium. The tritium may be in the form of water vapor or as elemental hydrogen gas. A vent manifold has been developed for use on FTWCs at other LANL sites. This vent manifold will connect to the top of the FTWC and open a release path through an existing port in the FTWC lid. Headspace gas inside the FTWC will pass through an AL-M1 molecular sieve bed to capture water vapor. This monitoring exhaust line will be set up at building 1028 for this venting operation and is not a permanent feature of the building. The *Application for Pre-Construction Approval under 40 CFR 61 Subparts A and H for Venting of Flanged Tritium Waste Containers (FTWCs) at TA-54* was submitted and approved by the U.S. Environmental Protection Agency, Region 6 in May 2019. A leak-tight chamber is fitted over the port in the FTWC lid, providing containment for the headspace gases while the plug is loosened. The gases can then be released in a controlled manner through a metering valve attached to the vent chamber. Once the pressure hazard is mitigated by venting, the FTWC will additionally be evacuated through a vacuum system to further mitigate the hazard. The FTWCs will still pose a radiological hazard and will be prepared for transportation, loaded at TA-54, and transported to LANL's Weapons Engineering Tritium Facility (WETF) at TA-16 for sorting and segregation. Transport will involve an on-site road closure and will be performed using the LANL Transportation Safety Document controls. In the same manner as at TA-54, Area G, pressure mitigation activities may also take place upon arrival outside the WETF facility prior to entry. The FTWCs will be unloaded at WETF using existing procedures and will be managed and processed using existing controls and procedures.

2.5 Storage and Repackaging Activities at WETF

The four FTWCs will be stored at WETF in room 122 and will be taken to room 116 for repackaging. The lids from the FTWCs will be unbolted and removed using standard hand tools and existing procedures. Facility radiological control systems will be utilized to manage contamination, primarily portable ventilation devices and fume hoods that are part of the facility ventilation system. The RCRA waste components (squibs) will be removed from the FTWCs, and placed in a container that meets requirements of Permit Section 3.3.

2.5.1 Container Management

The Permittees will meet all storage configuration and aisle spacing requirements as set forth in Permit Section 3.5.1.

The Permittees shall ensure that all containers used to store hazardous wastes for this project are in good condition (*e.g.,* no severe rusting or apparent structural defects) in accordance with Permit Section 3.2 and 40 CFR § 264.171. If a container is not in good condition or begins to leak, the Permittees shall transfer the waste from such a container into a container that is in good condition within 24 hours of discovery of the problem. All containers used for repackaging will meet all Department of Transportation (DOT) specifications under 49 CFR § 178 and requirements of the off-site facility waste acceptance criteria. They will be new, DOT-certified containers appropriate for their contents.

The Permittees shall use containers made of, or lined with, materials that are compatible with and will not react with the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired, in accordance with Permit Section 3.4 and 40 CFR § 264.172.

During storage and processing, containers will be managed to meet the requirements of Permit Section 3.5.

The Permittees shall ensure that all containers storing hazardous or mixed waste meet the labeling requirements set forth in Permit Section 3.6.

After transport from TA-54, Area G, building 1028 to WETF, containers will be transported between rooms 122 and 116 at WETF (where storage, segregation and repackaging activities will occur) using a pallet jack.

The four FTWCs will be stored at WETF in room 122 and will be taken to room 116 for repackaging. The contents of each container will be sorted, segregated, and repackaged to segregate the RCRA waste (the fired actuators/squibs) from the non-RCRA waste.

The planned temporary authorization activities consist entirely of treatment, storage and repackaging the four FTWCs.

2.6 Authorized Wastes and Waste Acceptance

WETF will be used only to process the four FTWCs currently stored at TA-54, Area G, building 1028 discussed in Section 2.3 of this request. This waste has been characterized in accordance with the requirements of Permit Section 2.4, *Waste Analysis*, and Permit Attachment C, *Waste Analysis Plan* (WAP), as applicable. The hazardous component of this waste is lead; therefore, the only applicable Environmental Protection Agency (EPA) Hazardous Waste Number is D008.

2.6.1 Visual Examination for Off-Site Disposal

During repackaging, all items will be visually examined by a certified examiner in order to be certified to be shipped to an off-site disposal facility. None of the containers to be processed contain free liquids.

2.7 Security and Access Control

Security and access control for TA-54, Area G, building 1028 is described in Permit Attachment A, *Technical Area (TA) - Unit Descriptions*, in Section A.4.4. WETF has an established, robust access control program and security infrastructure to ensure appropriate safeguards for nuclear material.

2.8 Hazards Prevention

Adherence to the current procedures and proper use of the structures and equipment will help to prevent hazards, prevent undue exposure of personnel to hazardous waste, and prevent releases to the environment. Specific requirements for TA-54, Area G, Pad 5 are included in Permit Attachment A, *Technical Area (TA) - Unit*

Descriptions, in Section A.4. Details specific to WETF in rooms 116 and 122 operations are presented in the following sections. In the event of an emergency, the procedures presented in the Permit Sections 2.10 and 2.11, and Permit Attachment D, *Contingency Plan*, in accordance with the requirements of 40 CFR §§ 264.50-56 and 270.14(b)(8) will be followed.

2.8.1 Waste Handling

Waste handling at TA-54, Area G, building 1028 will be conducted in accordance with Permit Part 3. The FTWCs will be stored before and after sorting, segregation and repackaging. FTWCs will be transported between rooms at WETF using a pallet jack.

2.8.2 Preventing Hazards in Unloading/Loading

The use of trained waste management personnel and proper handling equipment appropriate to a container's size and weight will help to prevent hazards while moving containers. Waste management personnel will be trained for safe handling operations in accordance with Permit Attachment F, *Personnel Training Plan*, of the Permit. Refer to Section 3.0 of this document for a discussion of training specific to this project.

2.8.3 Mitigating Effects of Power Outages

Electrical power is supplied at TA-16, rooms 116 and 122 to operate building ventilation systems, the Public Address (PA) system, various instruments, and other electrical equipment. Evacuation alarms, equipped with a battery backup, are located throughout WETF. During a power outage, operations will be discontinued until power is restored.

At permitted units where equipment is necessary to mitigate the effects of a power outage, the Permittees shall maintain batteries, generators, or some other form of backup power supply capable of operating equipment including evacuation alarms, emergency communication equipment, automatic fire suppression systems, and emergency lights (See 40 CFR §§ 270.14(b)(8)(iv) and 270.32(b)(2)). The backup power supplies will be used to meet the requirements of Permit Section 2.10.1, *Required Equipment*.

2.8.4 Preventing Undue Exposure

To prevent undue exposure of personnel to hazardous or mixed waste, a formal radiological protection requirements program has been established at WETF. Personal protective equipment appropriate for the waste being handled is worn by all on-site personnel at WETF involved in waste management activities within the area. Workers involved in waste handling at WETF are required to wear protective work uniforms and steel-toed/composite-toed shoes, as appropriate. Hard hats and gloves may also be worn while equipment is being operated and when containers are being loaded or unloaded.

2.9 Preparedness and Prevention

Preparedness and prevention procedures and equipment at TA-54, Area G, Pad 5 are in compliance with Permit Section 2.10. and Permit Attachment A, Section A.4.5. The specific descriptions for WETF are described in the section below.

2.9.1 Required Equipment

In accordance with Permit Section 2.10.1, *Required Equipment*, Permit Attachment D, *Contingency Plan,* and LANL requirements, WETF is specifically equipped with internal communication and alarm system devices, fire control equipment, and spill control equipment. Decontamination equipment such as portable eyewash stations and safety showers are available in numerous locations in WETF. Table 2-1 provides a list of the specific equipment located in or near Rooms 116 and 122.

WETF is equipped with multiple audible and visual safety-alarm systems to alert personnel in the event of an emergency and to evacuate the area. Fire-alarm pull boxes and/or drop box push-button alarms may be used by personnel to activate a local fire alarm when a fire or other emergency is discovered.

2.9.2 Testing and Maintenance of Equipment

In accordance with Permit Section 2.10.2, *Testing and Maintenance of Equipment*, all communications and alarm systems, fire protection, and decontamination equipment will be inspected, tested, and/or maintained as provided according to Permit Section 2.6.1, *Inspection Schedule*. Maintenance, repair and replacement of emergency equipment will be performed as required.

2.9.3 Access to Communications or Alarm Systems

Whenever Rooms 116 and 122 at TA-16 contain hazardous waste, employees will have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee in accordance with Permit Section 2.10.3 (*see* 40 CFR § 264.34(a)). No employee is allowed to work alone at WETF in Rooms 116 and 122. Employees will be capable of summoning external emergency assistance via a land-line telephone (*see* 40 CFR § 264.34(b)) without having to enter another building (*see* 40 CFR § 270.32(b)(2)). Table 2-1 provides a list of the specific communications equipment and alarms located in or near Rooms 116 and 122.

2.9.4 Space Requirements

Room 122 has an area of 612 square feet and has sufficient space for the temporary storage of the four FTWCs. Figure 2-2, shows the general location of Room 122 in WETF.

Room 116 has an area of 759 square feet and has sufficient space for the segregation and repackaging of the FTWCs. Figure 2-2, shows the general location of Room 116 in WETF. The hoist that will be used to remove the FTWCs from overpack is located in this room (Figure 2-3).

2.10 Contingency Plan

In the unlikely event that there is a documented release, procedures are in place and personnel are trained to respond in accordance with facility contingency plans, as applicable (per Permit Attachment D). The facility will immediately identify whether the breach will be managed as a contained spill, or a release that threatens human health or the environment (see Permit Section 1.9.12 and 1.9.13).

Hazardous waste spills are managed by type and severity of the incident. If a hazardous waste spill occurs, line management evaluates the type and severity of the spill and determines if assistance from the Facility's emergency management personnel is required. If not, the spill is managed internally by facility personnel.

For the treatment, storage, segregation and repackaging project at WETF in Rooms 116 and 122, the Permittees shall implement applicable provisions of this Contingency Plan and the applicable provisions of Permit Section 2 immediately to minimize hazards if there is a fire, explosion, or release of hazardous or mixed waste or constituents that could threaten human health or the environment.

Emergency equipment currently available for use at TA-54, Area G, Pad 5, building 1028 are listed in Table D-2, TA-54, Area G of Permit Attachment D; and equipment available at WETF in Rooms 116 and 122 are listed in Table 2-1. It may be replaced and/or upgraded with functionally equivalent components and equipment as necessary for routine maintenance and repairs.

2.11 Containment Systems

No free liquids are planned to be handled or managed during the temporary authorization activities.

2.12 Ignitable, Reactive, and Incompatible Wastes

Ignitable or reactive wastes will not be intentionally processed as part of this temporary authorization activity. However, if they are encountered unintentionally during activities, they will be packaged in sealed containers as prohibited or nonconforming items and will not be exposed to ignition sources. Precautions will be taken to prevent reactions that may generate extreme heat, pressure, fire, or explosion, and minimize the potential for uncontrolled toxic mists, fumes, dusts, or gases. Incompatible wastes will be segregated and separated during processing in accordance with 40 CFR § 264.17(c) and Permit Section 2.8.2, *Incompatible Wastes Precautions*. Together, all these measures will meet the requirements of 40 CFR §§ 264.17(a) and (b) and 264.176.

2.13 Inspections

All equipment associated with the treatment, storage, sorting, segregation and repackaging activity will be inspected in accordance with Permit Section 2.6 and Permit Attachment E (*Inspection Plan*). The Inspection Record Form (IRF) will be used on days when wastes associated with sorting, segregation and repackaging operations are present in Rooms 116 and 122 and weekly when only storage activities are occurring. No changes to the IRF are required.

2.14 Recordkeeping Requirements

In accordance with 40 CFR Part 264, Subpart E, recordkeeping requirements applicable to the temporary authorization activities are discussed in the following sections. Operations in rooms 116 and 122 at WETF will meet the requirements of Permit Section 2.12, *Recordkeeping and Reporting*.

2.15 Reporting

All reporting requirements under the Permit and pertaining to the temporary authorization activities will include these activities, as appropriate.

Table 2-1
TA-16-205 Emergency Equipment

FIRE CONTROL EQUIPMENT

- Dry-chemical fire extinguishers are located throughout WETF. The fire extinguishers are portable, manually-operated units and can be used by any employee in case of fire.
- Fire alarm drop boxes and push button stations are available throughout WETF. They can be activated by any employee in the event of fire to notify the Central Alarm Station.
- Smoke detectors are located throughout WETF.
- An automatic fire suppression sprinkler system is located at WETF.
- Fire hydrants are located outdoors on the north, south, and west sides of WETF.

SPILL CONTROL EQUIPMENT

- A spill control kit is available in Rooms 116 and 122 at WETF.

COMMUNICATION EQUIPMENT

- Telephones are located throughout WETF. The telephones are capable of handling incoming/outgoing calls and paging.
- Two-way radios are available for personnel working at WETF in Rooms 116 and 122, and a facility-wide paging system exists.

ALARMS AT WETF

- A facility fire alarm system and tritium alarm system exists and operators are trained and qualified on alarm response.

DECONTAMINATION EQUIPMENT

- Safety showers and eyewash stations are located throughout the facility for decontamination of personnel who receive a chemical splash to the skin or eyes.

PERSONAL PROTECTIVE EQUIPMENT

- A change room/decontamination shower with protective clothing is available in the facility. Protective clothing is also available in a locker upon entry into the tritium processing area for use by personnel working in or near Rooms 116 and 122 at WETF.

OTHER

If transportation is needed for evacuation, vehicles may be obtained through the emergency management personnel.

3.0 TRAINING REQUIREMENTS

The Permittees shall ensure that all personnel who are involved in hazardous waste management activities in rooms 116 and 122 successfully complete all training programs in compliance with the training requirements of 40 CFR § 264.16, which is incorporated herein by reference, as well as the training requirements in Permit Attachment F, *Personnel Training Plan*. Additionally, personnel will be trained to a specific WETF procedure for FTWC unsealing and unloading.

4.0 CORRECTIVE ACTION

Permit Attachment K, *Listing of SWMUs and AOCs,* provides information in response to regulatory requirements in 40 CFR §§ 270.14(d), 264.101, and 264.602.

5.0 CLOSURE PLAN

The closure plan for TA-54, Area G, Pad 5 is included as Permit Attachment G.8, *Technical Area 54, Area G, Pad 5 Outdoor Container Storage Unit Closure Plan*. Closure requirements for WETF associated with this temporary authorization are detailed in the sections below. These requirements were drafted in accordance with Permit Part 9, *Closure*.

5.1 Introduction

The temporary authorization area consists of two rooms within the WETF. When the area is no longer needed for storage of the waste, the following closure activities will be conducted.

5.2 Estimate Of Maximum Waste Processed

The four FTWCs that will be stored and repackaged in the rooms are a total volume of 340 gallons. Approximately 10 gallons of mixed waste will be segregated from the total volume and sent off-site for disposal.

5.3 General Information

5.3.1 Performance Standard

Rooms 116 and 122 at WETF will be returned to their original state.

5.3.2 Schedule

The activities outlined for closure will begin within 30 days after the mixed waste (repackaged lead components) has been evaluated and shipped off-site for disposal.

5.3.3 Amendment of the Plan

This closure plan will be amended in the event that a spill or release occurs during storage or repackaging.

5.4 Closure Procedures

5.4.1 Records Review And Structural Assessment

Operating records for this temporary authorization campaign will be reviewed for any leaks, spills, or loss of containment integrity during the period of treatment, storage, sorting and repackaging operations.

5.4.2 Decontamination and/or Removal of Structures and Equipment

Under normal operational conditions, it is expected that there will be no need to decontaminate any structure or equipment in Rooms 116 and 122. In the unlikely event that there is a documented release in the rooms, Permit conditions for indoor units in Permit Sections 9.4.3, 9.4.4, and 9.4.5 will generally become applicable. Permit Section 9.4.3.1 requirements will be met by performing at least two consecutive wipe-downs of the surfaces and structures using cheesecloth and approved cleaning agents.

5.4.3 Equipment Used During Decontamination Activities

Any equipment used for decontamination purposes will be managed in accordance with applicable LANL procedures.

5.5 Sampling and Analysis Plan

Pre-start wipe samples will be collected in Rooms 116 and 122 to establish a baseline condition to which the room will be returned at the conclusion of operations. Facility radiological control systems will be utilized to manage contamination, primarily portable ventilation devices and fume hoods that are part of the facility ventilation system.

5.5.1 Decontamination Verification Sampling Activities

Decontamination verification sampling activities for the constituent of concern, as described in Sections 5.5.1 through 5.5.5 below, will be conducted at WETF within Rooms 116 and 122 only in the event that there is a documented release. They would be conducted in order to verify that surfaces and related equipment at WETF meet the closure performance standards in Permit Section 9.2. All samples will be collected and analyzed in accordance with the Permit, Section 9.4.

One wipe sample will be collected from each piece of decontaminated equipment at WETF. In compliance with Permit Section 9.4.7.1.i, this plan will ensure the collection of at least one wipe sample from the floor and one from each wall (up to 11 feet in height from floor) of the room. Verification wipe samples will be collected from random locations within the storage, sorting and repackaging operational area within Rooms 116 and 122. A total of six wipe samples will be collected in room 122: one from the floor; one from each of the four walls; and one from the area of the entry door. One wipe sample will be taken from the floor in room 116 where the repackaging will occur.

5.5.2 Sample Collection Procedures

Samples will be collected in accordance with Permit Section 9.4.7.1, which incorporates guidance from the EPA (EPA, 2002), DOE (DOE, 1995), and other NMED-approved procedures.

5.5.2.1 Wipe Sampling

Surface wipe samples will be collected and analyzed to determine if residual hazardous constituents remain on the surfaces and related equipment at WETF in Rooms 116 and 122. Samples will be collected in accordance with the National Institute of Occupational Safety and Health (NIOSH) *Manual of Analytical Methods* (NIOSH, 1994). The appropriate wipe sample method will consider the type of surface being sampled, the type of constituent being sampled for, the solution used, and the desired constituent concentration detection limits.

The NIOSH method includes wiping a 100 square centimeter area at each discrete location with a gauze wipe wetted with a liquid solution appropriate for the desired analysis (*e.g.*, deionized water for lead). For wipe sampling, guidance from the analytical laboratory must be obtained prior to wipe verification sampling to confirm that the solution chosen for each analysis is appropriate for the analysis to be conducted and that wipe sampling is a proper technique for the analysis.

5.5.2.2 Cleaning of Sampling Equipment

Reusable sampling equipment will be cleaned and rinsed prior to use. Sampling equipment rinsate blanks will be collected and analyzed only if reusable sampling equipment is used. Reusable decontamination equipment, including protective clothing and tools, used during closure activities will be scraped as necessary to remove residue and cleaned with a wash water solution. Sampling equipment will be cleaned prior to each use with a wash solution, rinsed several times with tap water, and air-dried to prevent cross-contamination of samples. A disposable sampler is considered clean if still in a factory sealed wrapper.

5.5.3 Sample Management Procedures

The following sections provide a description of sample documentation, handling, preservation, storage, packaging, and transportation requirements that will be followed during the sampling activities associated with the closure.

5.5.3.1 Sample Documentation

Sampling personnel will complete and maintain records to document sampling and analysis activities. Sample documentation will include sample identification numbers, chain-of-custody forms, analysis requested, sample logbooks detailing sample collection activities, and shipping forms (if necessary).

5.5.3.2 Chain-Of-Custody

Chain-of-custody forms will be maintained by sampling personnel until samples are relinquished to the analytical laboratory. This will ensure the integrity of the samples and provide for an accurate and defensible written record of the sampling possession and handling from the time of collection until laboratory analysis. One chain-of-custody form may be used to document all of the samples collected from a single sampling event. The sample collector will be responsible for the integrity of the samples collected until properly transferred to another person. The EPA considers a sample to be in a person's custody if it is:

- In a person's physical possession;
- In view of the person in possession; or
- Secured by that person in a restricted access area to prevent tampering.

The sample collector will document all pertinent sample collection data. Individuals relinquishing or receiving custody of the samples will sign, date, and note the time on the analysis request and chain-of custody form. A chain-of-custody form must accompany all samples from collection through laboratory analysis. The analytical laboratory will return the completed chain-of-custody form to the Facility and it will become part of the permanent sampling record documenting the sampling efforts.

5.5.3.3 Sample Labels and Custody Seals

A sample label will be affixed to each sample container. The sample label will include the following information:

- A unique sample identification number;
- Name of the sample collector;
- Date and time of collection;
- Type of preservatives used, if any; and
- Location from which the sample was collected.

A custody seal will be placed on each sample container to detect unauthorized tampering with the samples. These labels must be initialed, dated, and affixed by the sample collector in such a manner that it is necessary to break the seal to open the container.

5.5.3.4 Sample Logbook

All pertinent information on the sampling effort must be recorded in a bound logbook. Information must be recorded in ink and any cross-outs must be made with a single line with the change initialed and dated by the author. The sample logbook will include the following information:

- The sample location;
- Suspected composition;
- Sample identification number;
- Volume/mass of sample taken;
- Purpose of sampling;
- Description of sample point and sampling methodology;
- Date and time of collection;
- Name of the sample collector;
- Sample destination and how it will be transported;
- Observations; and
- Name(s) of personnel responsible for the observations.

5.5.3.5 Sample Handling, Preservation, and Storage

Samples will be collected and containerized in appropriate pre-cleaned sample containers. The requirements in *SW-846* (EPA, 1986) for sample containers, preservation techniques, and holding times will be applicable. Samples that require cooling to 4 degrees Celsius will be placed in a cooler with ice or ice gel or in a refrigerator immediately upon collection.

5.5.4 Packaging and Transportation of Samples

All packaging and transportation activities will meet safety expectations, QA requirements, DOE Orders, and relevant local, state, and federal laws (including 10 CFR and 49 CFR). Appropriate Facility documents establish the requirements for packaging design, testing, acquisition, acceptance, use, maintenance, and decommissioning and for on-site, intra-site, and off-site shipment preparation and transportation of general commodities, hazardous materials, substances, wastes, and defense program materials.

Off-site transportation of samples will occur via private, contract, or common motor carrier, air carrier, or freight. All off-site transportation will be processed through the Facility packaging and organization unless the shipper is specifically authorized through formal documentation by the packaging and transportation organization to independently tender shipments to common motor or air carriers.

5.5.5 Sample Analysis Requirements

Samples will be analyzed for lead by an independent laboratory using the latest revision of SW-846 Methods 7000B and 7010. A field blank and field duplicate sample will also be collected to ensure compliance with QA/QC procedures defined by the latest revision of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (*SW-846*) (EPA, 1986).

5.6 Analytical Laboratory Requirements

The analytical laboratory will perform detailed qualitative and quantitative chemical analyses will have:

- A documented comprehensive QA/QC program;
- Technical analytical expertise;
- A document control and records management plan; and
- The capability to perform data reduction, validation, and reporting.

5.6.1 Data Reporting Requirements

Analytical results will include all pertinent information about the condition and appearance of the sample as-received. Analytical reports will include:

- A summary of analytical results for each sample;
- Results from QC samples such as blanks, spikes, and calibrations;
- Reference to standard methods or a detailed description of analytical procedures; and
- Raw data printouts for comparison with summaries.

The laboratory will describe sample preparations that occur during the analysis in sufficient detail so that the data user can understand how the sample was analyzed.

5.7 Waste Management

All waste generated during closure activities for the temporary authorization work will be controlled, handled, characterized, and disposed of in accordance with Permit Section 9.4.5, Permit Attachment C (*Waste Analysis Plan*), and Facility waste management procedures.

5.8 Closure Report

Within 60 days of completion of closure activities at TA-54, Area G, building 1028 and TA-16, WETF, Rooms 116 and 122, a report will be prepared and submitted to the Department in accordance with Permit Section 9.5.

6.0 REFERENCES

LANL, 2010. *Los Alamos National Laboratory Waste Acceptance Criteria,* P409-1, Los Alamos National Laboratory, Los Alamos, New Mexico, September 2010.

NMED, 2010. *Los Alamos National Laboratory Hazardous Waste Facility Permit*, New Mexico Environment Department, Santa Fe, New Mexico.

EPA, 1986 (and all approved updates). *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA-SW-846, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, U.S. Government Printing Office, Washington, DC.

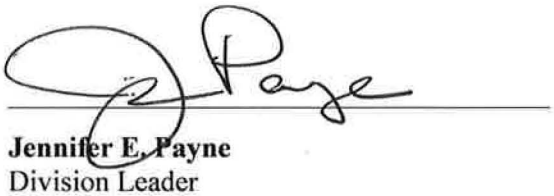
EPA, 2019. National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, Subparts A and H, Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities, May 22, 2019 (http://permalink.lanl.gov/object/tr?what=info:lanl-repo/eprr/ESHID-603413).

NIOSH, 1994. The National Institute for Occupational Health and Safety (NIOSH) *Manual of Analytical Methods*, 4th ed. Issue 1. 1994.

LANL, 2019. Application for Pre-Construction Approval under 40 CFR 61 Subparts A and H for Venting of Flanged Tritium Waste Containers (FTWCs) at TA-54, May 16, 2019 (http://permalink.lanl.gov/object/tr?what=info:lanl-repo/eprr/ESHID-603412).

7.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to 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.



5 March 2020

Jennifer E. Payne
Division Leader
Environmental Protection & Compliance Division
Triad National Security, LLC

Date Signed

06 March 2020

Karen E. Armijo
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

Date Signed

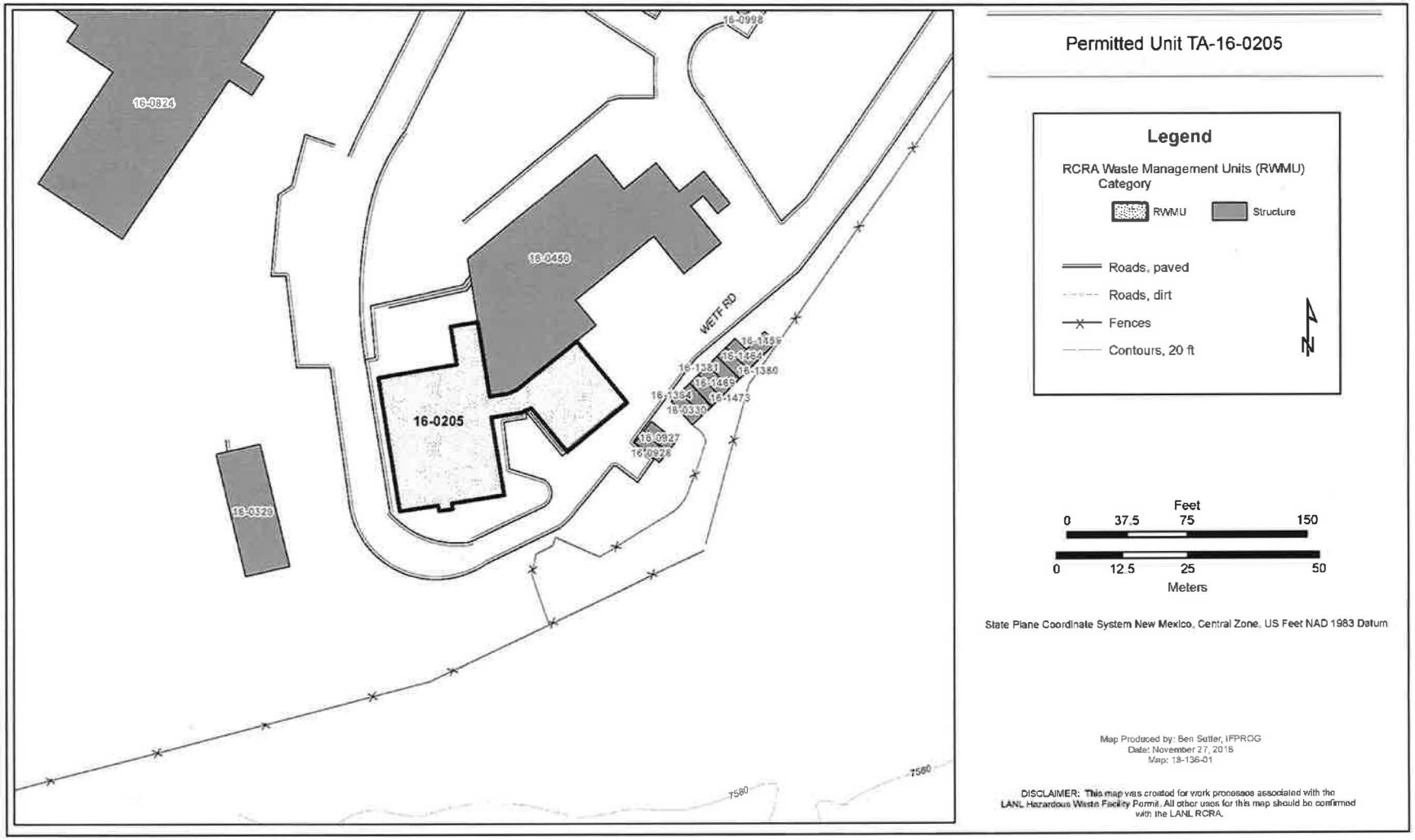


Figure 2-1 TA-16, Building 205, Project Location

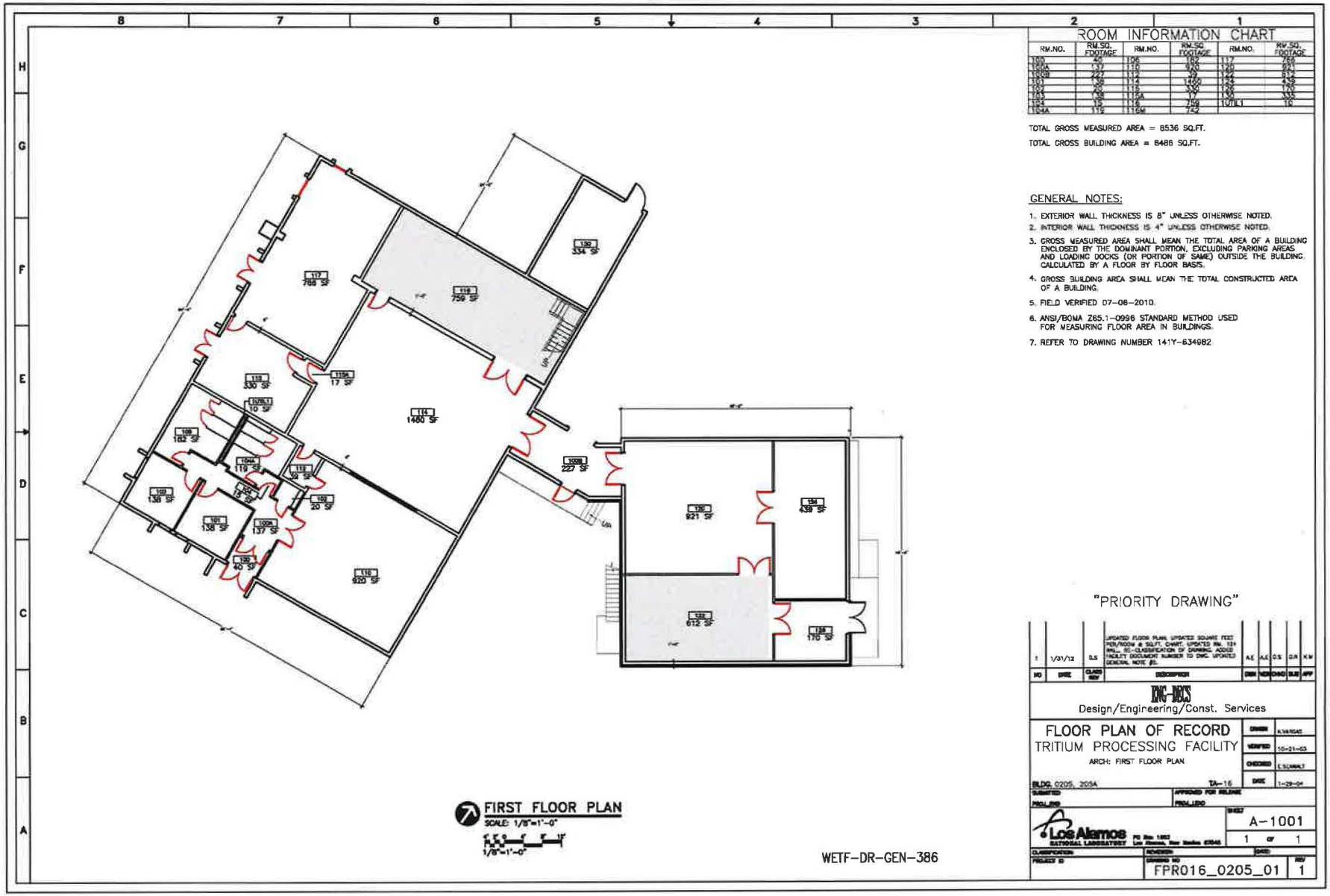


Figure 2-2 - TA-16-205, Rooms 116 and 122

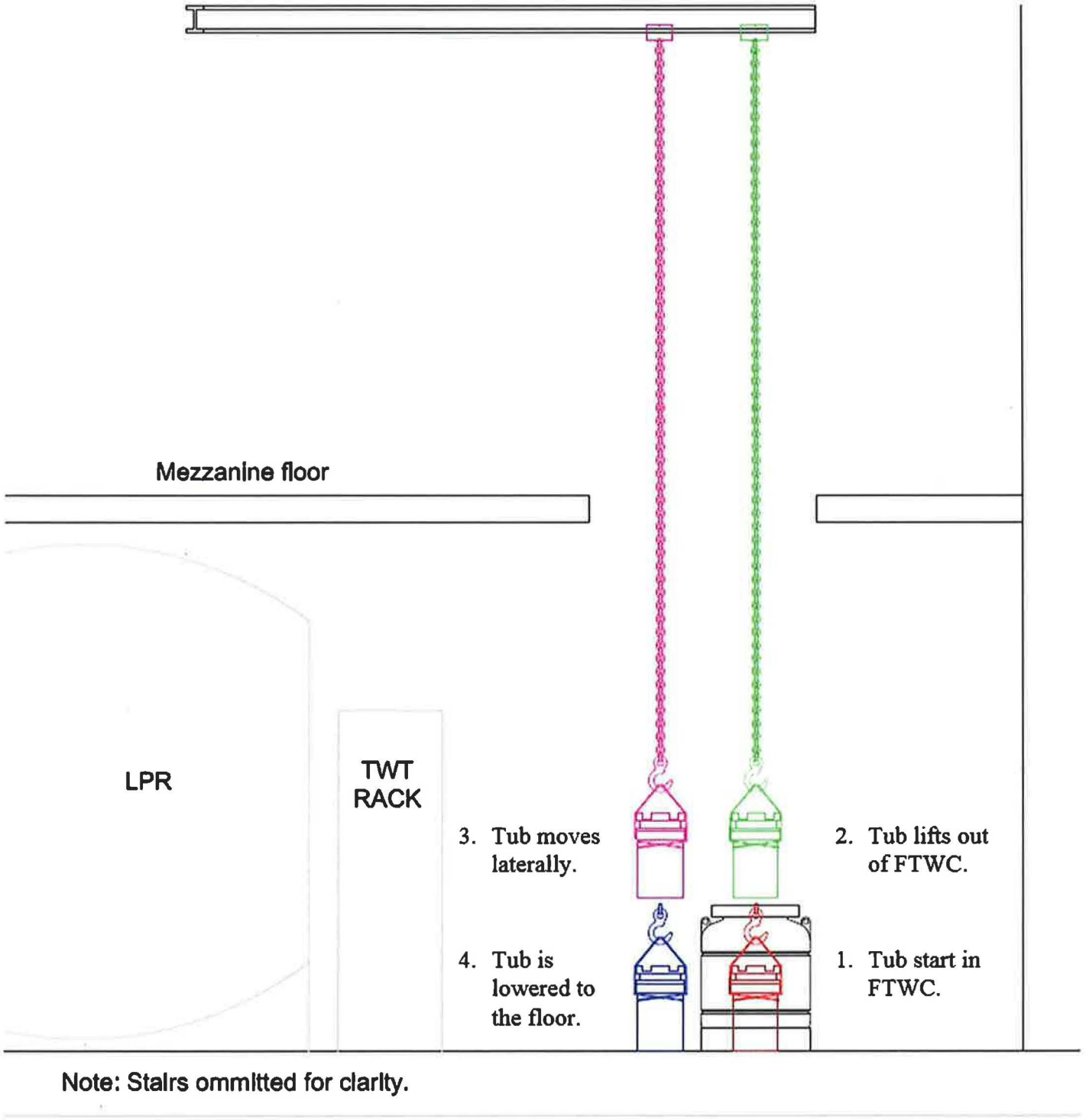


Figure 2-3 TA-16, Room 116 FTWCs Removal from Overpack

ENCLOSURE 2

Draft Public Notice

EPC-DO: 20-074

LA-UR-20-22103

Date: MAR 0 9 2020

Resubmittal of Temporary Authorization Request for Waste Treatment, Storage, and Repackaging, Los Alamos National Laboratory Hazardous Waste Facility Permit March 2020

EPA ID No. NM0890010515

The Department of Energy (DOE) and Triad National Security, LLC (Triad) have resubmitted a temporary authorization request to the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) for the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (the Permit). The Permit authorizes the DOE, Triad, and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) to manage, store, and treat hazardous waste at LANL. The temporary authorization request supports a one-time, short-term treatment, storage, repackaging sort and segregation campaign of mixed hazardous waste at LANL, is intended to make the waste amenable for disposal at an off-site facility.

This temporary authorization request will support the processing (venting, sorting, segregation, and repackaging) of four Flanged Tritium Waste Containers (FTWCs) as necessary to meet DOT requirements. The four FTWCs must be mitigated prior to transport to TA-16 by venting. The Weapons Engineering Tritium Facility (WETF) at TA-16 is not in a permitted unit, but the only facility equipped to process tritium contaminated material, and has the necessary safety and environmental controls for treatment, sorting and storage. The requested temporary authorization will allow these activities to be performed in an appropriate location so that the FTWCs can be safely processed and shipped to an off-site facility. Resubmittal of this permit modification request provides additional pressure mitigation activity locations and provides an opportunity to address comments received from the NMED-HWB. Approval of this request will support efforts to reduce the Site Treatment Plan (STP) waste inventory, and enable shipment of these wastes. If DOE/Triad are unable to perform this activity, there will be no alternative but to continue to safely store these four FTWCs at TA-54, Area G as STP inventory under the Federal Facility Compliance Order.

The official permit is located on the NMED-HWB webpage at: https://www.env.nm.gov/hazardous-waste/lanl-permit/. The permit modification submittal is located in the LANL Electronic Public Reading Room (http://eprr.lanl.gov) and the Hardcopy Public Reading Room located in Pojoaque at:

Northern New Mexico Citizens' Advisory Board Office
94 Cities of Gold Road
Santa Fe, NM 87506

If you have any questions regarding this temporary authorization request, please contact Patrick Padilla at (505) 667-3932 or plpadilla@lanl.gov if additional information would be helpful.

LA-UR-20-22103

Waste Management Programs
P.O. Box 1663, Mail Stop K404
Los Alamos, NM 87545

LA-UR-20-22103