

## LA-UR-16-21243

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Title: ADESH-AP-TOOL-810 Waste Processing at Permitted Units

Author(s): Martinez, Geraldine Emily

Intended for: Environmental Programs

Issued: 2016-03-01 (Rev.1) (Draft)

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<b>ADESH-AP-TOOL-810</b>	Revision: <b>0</b>	
Effective Date: 01/14/2016	Next Review Date: 01/14/2019	

## Environment, Safety, Health Directorate

### Administrative Procedure

# Waste Processing at LANL Hazard Waste Permitted Units

#### Document Owner/Subject Matter Expert:

Name:	Organization:	Signature:	Date:
Geri Martinez	ENV-CP	Signature on File	01-11-16

Derivative Classifier:  **Unclassified** or  **DUSA ENVPRO**

Name:	Organization:	Signature:	Date:
Gian Bacigalupa	ENV-CP	Signature on File	01-11-16

#### Approval Signatures:

Quality Assurance Reviewer:	Organization:	Signature:	Date:
Doris Quintana	QPA/OIO	Signature on File	01-12-16
Responsible Line Manager:	Organization:	Signature:	Date:
Raeanna Sharp-Geiger	ADESH	Signature on File	01-14-16

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**REVISION HISTORY**

<b>Document Number and Revision</b> <i>[Include revision number, beginning with Revision 0]</i>	<b>Effective Date</b> <i>[Document Control Coordinator inserts effective date]</i>	<b>Description of Changes</b> <i>[List specific changes made since the previous revision]</i>
ADESH-AP-TOOL-810, Rev. 0	01/14/2016	This document was reformatted into a new template. This document supersedes ADESH-TOOL-810 R0.

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## 1.0 INTRODUCTION

The purpose of this document is to provide requirements for Waste Processing at LANL Hazardous Waste Permitted Units. This document is managed and owned by the Associate Directorate Environment, Safety and Health and provides instructions on the applicability of the requirement.

### 1.1 Purpose

This document summarizes the activities that are conducted at permitted units and are authorized under the storage portions of the LANL Hazardous Waste Facility Permit.

### 1.2 Scope

This document applies to any LANL employee, contractor, or sub-contractor who has been identified as a waste generator.

## 2.0 PRECAUTIONS AND LIMITATIONS

This document cannot establish new requirements; it may only summarize the requirements in federal or state statutes/regulations/permits, DOE Orders, and authorized Laboratory policies.

## 3.0 REQUIREMENTS

Requirements established in the 2010 [Los Alamos National Laboratory Hazardous Waste Facility Permit](#) (and all updates) must be met for all waste processing activities.

**Note:** Secondary material should be segregated from the regulated waste being processed. If secondary material is added during the process, the activity becomes a waste generating process and must undergo waste characterization. Additionally, the Waste Generator must ensure that any secondary material added to the waste is compatible (See ADESH-AP-TOOL-115 "Waste Compatibility") with the waste.

**Note:** Prior to conducting any resizing activities, contact ENV-CP. A permit modification may be required.

### 3.1 Location and Type of Waste Processing at Treatment Storage and Facilities (TSFs)

#### TA-50

TA-50, Building 69, Waste Characterization, Reduction, and Repackaging Facility (WCRRF), is used primarily for repackaging transuranic waste into standard sized containers for transport to, and disposal at, the Waste Isolation Pilot Plan (WIPP).

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### TA-54

TA-54, Area G, Pad 11, Dome 375 contains a modular structure that is used for decontamination, segregation, waste assay, reclassification activities and repackaging of transuranic waste prior to shipment offsite. Also located on the pad is the unit, Real-Time Radiography (RTR1), which is used to provide X-ray examination of the contents of waste drums.

TA-54, Area G, Pad 1, Dome 412 contains five cells each of which are used for sorting and segregating transuranic waste and mixed transuranic waste, decontamination, and packaging waste items.

TA-54, Area G, Pad 10, also includes the following activities:

- The multichannel scaling (MCS) and a high efficiency neutron counter (HENC). The HENC are designed to provide a passive neutron and gamma measurement of transuranic waste drums in 55 gallon containers.
- The Super High Efficiency Neutron Coincidence (SuperHENC) counter is designed to provide a passive neutron and gamma measurement of large transuranic waste containers like standard waste boxes.
- RTR system #2 is designed to provide X-ray examination of the contents of a waste drum.
- Heated storage is utilized for storing transuranic and mixed transuranic waste storage prior to characterization.

TA-54, Area G, Structure 33, contains a drum venting system.

### TA-63

TA-63, Transuranic Waste Facility (TWF) when constructed will include pads for trailer housing and the following characterization equipment:

- RTR unit. The non-destructive assay (NDA) equipment in the trailer is designed to provide X-ray examination of the contents of transuranic waste drums.
- HENC unit. The NDA equipment in the trailer is designed to provide a passive neutron and gamma measurement of 55 gallon transuranic waste drums.
- The SuperHENC unit. The NDA equipment in the trailer is similar to the HENC but includes a high efficiency neutron counter and a gamma counter that are both designed to handle standard waste boxes.

**NOTE:** If there are any changes to the unit, additions to the waste, or resizing of waste to be conducted, a permit modification may be required. For assistance call 665-3435.

### 3.2 Characterization

Refer to [ADESH-AP-TOOL-111](#) "Waste Characterization."

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### 3.3 Definitions

**Waste processing** - includes any process tasks that change the contents, composition, or form of the waste being prepared for disposal. Waste processing at the Facility that is not defined as treatment is limited to sorting, segregating, repackaging, HENC, RTR, drum venting, and heated storage. These activities can be conducted within generator areas and at TSFs to make waste amenable for shipment off-site for disposal. These processing activities are not considered treatment of waste because they do not change the physical, chemical, or biological characteristics of the waste.

**Secondary material** - means miscellaneous materials associated with waste processing that are placed into primary or daughter drums during packaging or repackaging. Examples of secondary waste includes gloves, tools, rags, wipes (Kimwipes), plastic labels, tags, Personal Protective Equipment (PPE), plastic sheeting used for contamination control, and original packaging material (e.g., plastic bags, plywood sheathing, rigid liner lids cut into pieces).

**Resizing** - for waste management purposes incorporates any activity that can be categorized as resizing waste to fit into shipping containers including but not limited to compaction and size reduction using hand tools.

### 4.0 RECORDS

Records generated by this document will be submitted for records management in accordance with [P1020-1](#), *Laboratory Records Management* and if applicable, with the [ADESH-AP-006](#), *Records Management Plan*.

### 5.0 TRAINING

**Persons who work in TSFs must complete:**

- Course #7488, *RCRA Personnel Training*;
- Course #28582, *RCRA Refresher (Self-Study)*, every twelve months; and
- Course #23263, *Waste Generation Overview Live*.

**Note:** The RCRA-related training listed above must be completed within six months of employment; during this period, workers must work under the supervision of a trained worker.

**Remediation Workers must complete:**

- Course #23263, *Waste Generation Overview Live*;
- Course #4464 *HAZWOPER: General Site Worker*, or Course #4465, *HAZWOPER: Limited Site Worker*;
- Course #28652 *HAZWOPER: Refresher*, every twelve months;
- Course #7488, *RCRA Personnel Training*;
- Course #28582, *RCRA Refresher (Self-Study)*, every twelve months; and or other courses as assigned by the supervisor

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**6.0 REFERENCES**

[LANL Hazardous Waste Facility Permit](#)

**7.0 ATTACHMENTS OR APPENDICES**

N/A