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**Environment, Safety, Health Directorate**

**Administrative Procedure**

**Elementary Neutralization**

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**REVISION HISTORY**

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## 1.0 INTRODUCTION

The purpose of this document is to provide requirements for Elementary Neutralization (see definition in Section 4.0). 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 provides guidance for complying with 40 CFR §264.1(g)(6) and 260.10.

### 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/state statutes/regulations/permits, DOE Orders, and authorized Laboratory policies.

## 3.0 GENERAL REQUIREMENTS

### **Neutralization of a hazardous waste meets the RCRA definition of treatment (see Section 4.0).**

The LANL Hazardous Waste Facility Permit and the hazardous waste management regulations prohibit treatment without a permit except in a few very limited circumstances. This document discusses the *Elementary Neutralization Unit* (ENU) exemption, which allows generators and Treatment, Storage and Disposal Facilities (TSDFs) to neutralize certain hazardous and mixed wastes without a permit provided certain criteria are met. Any questions regarding implementation or interpretation of these requirements should be addressed to ENV-CP at 7-6259.

To be exempt, the generator or TSDF operator may only neutralize hazardous/mixed waste that is corrosive ONLY (D002)(i.e., it has no other EPA Hazardous Waste Numbers), and may only conduct neutralization in a unit that meets the RCRA definition of a tank, tank system, container, transport vehicle, or vessel.

### **Questions**

The questions below will help you determine if you meet the ENU exemption.

1. Does the hazardous/mixed waste you plan to neutralize exhibit only the characteristic of corrosivity (D002) (i.e., it has no other EPA Hazardous Waste? For example, if your waste stream exhibits the characteristics of both ignitability (D001) and corrosivity (D002), it does not qualify for the exemption.

*If you answered yes to the question above, go on to Question 2.*

If you answered no, please call 7-6259.

2. Will the hazardous/mixed waste be neutralized in a unit that meets the definition of a tank, tank system, container, transport vehicle or vessel (see Section 4.0)?

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If you answered no, please call 7-6259.

If you answered yes to all of the questions above, you have met the permit exemption. Call 7-6259 for additional paperwork required and final authorization to proceed with the neutralization activity.

#### 4.0 DEFINITIONS AND ACRONYMS

**Treatment** – means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste (40 CFR §260.10).

**Elementary neutralization** – means neutralizing (treatment) hazardous/mixed waste bearing ONLY the characteristic of corrosivity per 40 CFR §262.22 (i.e., it bears the D002 EPA Hazardous Waste Number only) and neutralization must occur in a tank, tank system, container, transport vehicle or vessel (as defined in 40 CFR §260.10).

**Corrosivity (D002)** – A solid waste exhibits the characteristic of corrosivity if it is: (1) aqueous and has a pH of less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using Method 9040C in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (SW-846), or (2) it is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35mm (0.250 inch) per year at a test temperature of 55 C (130 F) as determined by Method 1110A in SW-846.

**Container** – Any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

**Tank** – A stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

**Tank system** – A hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

**Transport vehicle** – A motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

**Vessel** – Includes every description of watercraft, used or capable of being used as a means of transportation on the water.

See LANL [Definition of Terms](#).

See LANL [Acronym Master List](#).

#### 5.0 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*.

- Documentation must be maintained in WCATS for three years.

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## 6.0 TRAINING

### **Waste Generators and WMCs must complete:**

- [Course #23263](#), *Waste Generation Overview Live*; and
- [Course #21464](#), *Waste Generation Overview Refresher SS*, every three years.

### **Persons who work in, or are owners of, less-than-90-day waste accumulation areas must complete:**

- [Course #7488](#), *RCRA Personnel Training*, and
- [Course #28582](#), *RCRA Refresher (Self-Study)*, every twelve months.

### **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.

## 7.0 REFERENCES

40 CFR 260-265

## 8.0 ATTACHMENTS OR APPENDICES

N/A