

ORARNGR 420-47

Installations

Hazardous Material, Waste and Spill Management Plan

Joint Forces Headquarters
Oregon Army National Guard
Salem, OR
1 September 2009

UNCLASSIFIED

SUMMARY of CHANGE

ORARNGR 420-47
Hazardous Material, Waste and Spill Management Plan

List of changes as of 10 October 2008

- Updated information for managing hazardous materials and waste (Throughout).
- Incorporates and precedes ORARNGR 210-6 dated 1 July 1998 (Chapter 5).
- Includes new Waste Protocol Sheets (appendix A).

Installations

Hazardous Material, Waste and Spill Management Plan

By Order of the Governor:

incorporates and precedes
ORARNGR 210-6 dated 1 July
1998.

The Director, AGI, has the
authority to approve exceptions
to this regulation consistent with
controlling law and regulation.
The Director, AGI, may
delegate this approval authority
to the environmental branch
chief (AGI-ENV).

RAYMOND F. REES
Major General
The Adjutant General

Summary. This regulation
includes information and
procedures for managing
hazardous materials, waste and
spill prevention and response.

Official:



DONALD F. BOND
COL, FC
Chief of Staff

Applicability. This regulation
applies to the Joint Forces
Headquarters, the Oregon Army
National Guard, the State
Defense Force of Oregon, the
Oregon Military Department and
all tenants on facilities owned,
leased or operated by any of the
previously identified entities.

Suggested Improvements.
Users are invited to send
comments and suggested
improvements to Oregon
Military Department, AGI-ENV,
PO Box 14350, 1776 Militia
Way SE, Salem, OR 97309-
5047.

Distribution. This publication
is available in electronic media
only, located on the official
Oregon National Guard web site

History. This regulation
updates ORARNGR 420-47
dated 1 August 2001. It

**Proponent and exception
authority.** The proponent for
this regulation is the Director,
Installations Division (AGI).

Contents

Chapter 1

Introduction, page 1

- Purpose and Scope 1.1, page 1
- Reviews and Revisions 1.2, page 2
- Applicable Regulations 1.3, page 2
 - State Regulations, page 2
 - Federal Regulations, page 2
 - Military Regulations, page 3
- Contractual Obligations 1.4, page 3
- Description of ORARNG Operations 1.5, page 3
- Responsibilities 1.6, page 4
- Forms for Submitting Changes to this Plan 1.7, page 4
 - DA Form 2028, page 5

Contents-Continued

Chapter 2

Managing Hazardous Materials, *page 7*

General Requirements for Managing Hazardous Materials 2.1, *page 7*

Obtaining and Cataloging Material Safety Data Sheets 2.2, *page 8*

Determining Hazardous Material Compatibility 2.3, *page 10*

Method 1: Determining Compatibility Using HMIRS MSDSs, *page 10*

Method 2: Determining HCC and Compatibility Using DOT Hazard Labels, *page 16*

Method 3: Determining HCC and Compatibility Using OSHA Precautionary Labels, *page 22*

Maintaining and Extending Shelf Life 2.4, *page 24*

Shelf Life versus Service Life as defined in DoD 4140.27 / DLA J-373, *page 24*

Accessing the Defense Logistics Agency (DLA) Shelf-life Website and Obtaining Additional Information, *page 25*

Shelf-life Types 2.5, *page 27*

Type I Materials, *page 27*

Type II Materials, *page 27*

Selecting Hazardous Material Storage Units 2.6, *page 37*

Setting Up Storage Areas 2.7, *page 38*

Storage Lockers, *page 38*

Storage Rooms and Buildings, *page 40*

Storage Racks, *page 41*

Storage for Compressed Gases, *page 42*

Moving Cylinders, *page 43*

Stocking a Hazardous Material Storage Location 2.8, *page 43*

Contents- Continued

Inspecting Hazardous Material Storage Locations, *page 45*

Maintaining and Tracking Inventory 2.9, *page 45*

Procuring Hazardous Materials, *page 45*

Replenishing Hazardous Material Stock, *page 46*

Chapter 3

Managing Waste, *page 47*

Types of Waste 3.1, *page 47*

Hazardous Waste (HW), *page 48*

Universal Waste (UW), *page 48*

Recyclable or Reusable Materials/Waste, *page 48*

Non-RCRA Regulated Waste, *page 49*

Non-Hazardous Waste, *page 49*

General Refuse, *page 49*

Waste Management Made Easy – Waste Protocol Sheets 3.2, *page 49*

Hazardous Waste Generator Status 3.3, *page 50*

Setting-up Hazardous Waste Storage Areas 3.4, *page 52*

Hazardous Waste Accumulation Areas (HWAAs), *page 52*

Setting Up a Hazardous Waste Accumulation Area, *page 53*

Maintaining a Hazardous Waste Accumulation Area, *page 53*

Satellite Accumulation Area (SAA), *page 54*

Setting Up Satellite Accumulation Areas, *page 54*

Maintaining Satellite Accumulation Areas, *page 55*

Contents- Continued

Hazardous Waste Storage Area Emergency Preparedness and Prevention 3.5, *page 55*

Accumulating Other Wastes 3.6, *page 56*

Selecting and Preparing a Container 3.7, *page 56*

Marking and Labeling Containers 3.8, *page 58*

Hazardous Waste, *page 58*

Hazardous Waste from Off-Site CEGs, *page 59*

Universal Waste, *page 60*

Non-Hazardous and Non-RCRA Regulated Waste, *page 61*

Adding Waste to the Container 3.9, *page 62*

Waste Determination and Requesting Analysis of Waste 3.10, *page 62*

Chapter 4

Turning In and Transporting Hazardous Materials and Hazardous Waste, *page 65*

Overview of Turn-in Process 4.1, *page 65*

Turn-in Procedures for Hazardous Materials 4.2, *page 65*

Generator Specific Turn-in Procedures for Hazardous Waste for ORARNG Facilities 4.3, *page 66*

State Maintenance Worker (SMW) Waste Turn-in, *page 66*

Unit / Readiness Center Waste Turn-in, *page 67*

Maintenance Shop Waste Turn-in, *page 67*

Waste Turn-in Directly to the USPFO-SDC, *page 68*

Preparation of the Waste Turn-in Form, AGO Form 200-1-14 4.4, *page 68*

Additional Waste Turn-in Procedures 4.5, *page 70*

Contents- Continued

Indoor Range Residue and Debris Considerations, *page 71*

Asbestos Containing Materials (ACMs) Considerations, *page 72*

Contaminated Soil, *page 73*

The Waste Off-Site CEG Log, Form 200-1-15 4.6, *page 73*

WASTE LOG OFF-SITE CEG, *page 74*

Transporting Hazardous Materials and Hazardous Waste Overview 4.7, *page 75*

DRMO Contractor Pick Up, *page 75*

Self-transporting, *page 75*

Preparing Shipping Papers 4.8, *page 76*

Loading/Segregation of Containers 4.9, *page 76*

Forms and Instructions 4.10, *page 76*

Sample AEDA Authorized Personnel Letter, *page 78*

Sample AEDA Turn-in Memorandum for Record, *page 79*

ASN-4, Asbestos Waste Shipment Report Form, *page 80*

Instructions for using DEQ Form ASN-4 Waste Shipment Record Form, *page 81*

Instructions for Completing DD Form 836, *page 83*

DD Form 836 – Dangerous Goods Shipping Paper, *page 84*

Chapter 5

Spill Response Procedures, *page 85*

Safety 5.1, *page 85*

Spill Response 5.2, *page 85*

Contents- Continued

Is the spill an emergency? *page 85*

Must the spill be reported immediately? *page 86*

Special considerations for local training areas and convoys, *page 89*

Responsibilities 5.3, *page 89*

Installation On-Scene Coordinator (IOSC), *page 89*

Environmental Point of Contact (EPOC), *page 90*

ORARNG Environmental Office (AGI-ENV), *page 90*

Spill Reporting 5.4, *page 91*

Hazards Associated with Chemicals Common to the ORARNG 5.5, *page 92*

Petroleum, Oil, and Lubricants (POL), *page 92*

Acids, *page 92*

Caustics (bases), *page 92*

Flammable and Combustible Liquids, *page 93*

Spill Clean Up 5.6, *page 93*

Spill clean-up can only begin when, *page 93*

Personal Protective Equipment (PPE), *page 93*

Materials, *page 93*

Clean Up Steps, *page 94*

Who Pays? 5.7, *page 96*

Spill supplies and equipment, *page 96*

Spill clean-up, *page 96*

Spill Prevention, 5.8, *page 96*

Facility Spill Response Plan, *page 96*

Appendix A. Waste Protocol Sheets A-1

Appendix B. Glossary and Acronyms B-1

Table List

- Table 2-1: Storage Segregation Matrix, *page 12*
Table 2-2: DOT Labels, *page 16*
Table 2-3: Precautionary Labels, *page 23*
Table 2-4: Type I Material Shelf-life Codes, *page 27*
Table 2-5: Type II Material Shelf-life Codes, *page 28*
Table 3-1: Types of Waste, *page 47*
Table 3-2: Generator Criteria, *page 51*
Table 3-3: ORARNG Generator Identification Number, *page 51*
Table 3-4: Approved Containers for ORARNG Units, *page 57*
Table 5-1: Emergency Response Notification Phone Numbers, *page 91*
Table 5-2: Emergency Response Reporting Phone Numbers, *page 92*
Table 5-3: Recommended Spill Response Equipment and Supplies, *page 94*
Table 5-4: Spill Response Equipment and Supplies Ordering Information, *page 95*

Figure List

- Figure 2-1: Example MSDS and HM Cataloging, *page 9*
Figure 2-2: MSDS Showing HCC, *page 11*
Figure 2-3: Segregated Drums, *page 11*
Figure 2-4: Sample DOT Labels, *page 16*
Figure 2-5: Storage Segregation Using DOT Labels, *page 21*
Figure 2-6: Example Precautionary Label, *page 22*
Figure 2-7: DoD Shelf-life Website Entrance, *page 26*
Figure 2-8: QSL Web Application, *page 29*
Figure 2-9: QSL Example Screenshots, *page 31*
Figure 2-10: FedLog Example, *page 33*

Contents- Continued

- Figure 2-11: MQCSS Web Application, *page 34*
- Figure 2-12: MQCSS Example Search Using an NSN, *page 36*
- Figure 2-13: Shelf-life Extension Notice Label, *page 37*
- Figure 2-14: Flammable Storage Locker, *page 40*
- Figure 2-15: Storage Building, *page 41*
- Figure 2-16: Storage Rack, *page 41*
- Figure 2-17: Compressed Gas Storage, *page 43*
- Figure 2-18: Locker Set and Numbering, *page 44*
- Figure 3-1: Example Waste Protocol Sheet, *page 50*
- Figure 3-2: Hazardous Waste Label – Accumulation, *page 58*
- Figure 3-3: Hazardous Waste Label – Transportation, *page 59*
- Figure 3-4: CEG Hazardous Waste Label – Off-Site CEG Waste, *page 59*
- Figure 3-5: Universal Waste Label, *page 60*
- Figure 3-6: Universal Waste Label, *page 60*
- Figure 3-7: Non-Hazardous Waste Label, *page 61*
- Figure 3-8: Non-RCRA Regulated Waste Label, *page 61*
- Figure 3-9: Example Pending Analysis Label, *page 63*
- Figure 4-1: Example Waste Turn-in Inventory Form (AGO Form 200-1-14), *page 69*
- Figure 4-2: Example Hazardous Waste Determination Worksheet (AGO Form 200-1-6), *page 70*
- Figure 5-1: Spill Response Flow Chart, *page 88*

Chapter 1. Introduction

This Hazardous Material, Waste, and Spill Management Plan (HMWSMP or Plan) prescribes responsibilities, policies, and procedures for storing and managing hazardous materials (HMs), accumulating and managing wastes and responding to spills of HMs and wastes within the Oregon Army National Guard (ORARNG). Required by Army Regulation (AR) 200-1, Environmental Protection and Enhancement, this Plan is written to ensure ORARNG compliance with applicable federal, state, and local environmental laws and regulations.

Portions of this Plan are formatted like an Army Technical Manual, with easy-to-follow procedures and many visual cues. To use this Plan, look on the front cover to see what chapter contains the needed information and then flip to the tab for that chapter.

This chapter addresses the following topics:

1.1 Purpose and Scope,	<i>page 1</i>
1.2 Reviews and Revisions,	<i>page 2</i>
1.3 Applicable Regulations,	<i>page 2</i>
1.4 Contractual Obligations,	<i>page 3</i>
1.5 Description of ORARNG Operations,	<i>page 3</i>
1.6 Responsibilities,	<i>page 4</i>
1.7 Forms for Submitting Changes to this Plan,	<i>page 4</i>

1.1 Purpose and Scope

This Plan documents the ORARNG HMs, waste, and spill management program and provides procedures for minimizing the amount of materials used and waste generated through pollution prevention (P2) efforts. It applies to the following:

- All ORARNG units, personnel, facilities, and operations throughout the state.
- All state and federal civilian employees of the ORARNG.
- Tenants and tenant activities on ORARNG properties.
- Military training exercises conducted by the Oregon Air National Guard (ORANG), United States Army Reserve (USAR), or other active or reserve units at ORARNG facilities or training sites.
- Other public or private users of ORARNG property.

Activities permanently located on ORARNG property or active duty installations must comply with this Plan unless the plan for the host activity dictates otherwise. If the active duty installation provides standard operating procedures (SOPs) which supersede this Plan, elements of this Plan may be used as a best management practice (BMP).

1.2 Reviews and Revisions

The Environmental Program Manager (EPM) will coordinate the review of this Plan at least once every two years. All Environmental Points of Contact (EPOCs), as well as any other ORARNG personnel directly involved in HM or hazardous waste (HW) management, are encouraged to provide comments and input to this Plan. To do so, complete the Department of the Army (DA) Form 2028 located at the end of this chapter and forward to the Adjutant General Installations – Environmental (AGI-ENV) section.

1.3 Applicable Regulations

See ORARNG Pamphlet (Pam) 200-1 for regulations that apply to all applicable environmental program areas. State, federal, military and local regulations that apply to the management of HM, HW, and spills include the following.

State Regulations

The Oregon Department of Environmental Quality (DEQ) has obtained primacy from the United States Environmental Protection Agency (EPA) to enforce solid and HW management standards. Regarding the management of HM and HW including spills, the ORARNG must comply with the Oregon Revised Statutes (ORS) Chapters 465, 466, 468, and 468A, as well as Oregon Administrative Rules (OAR) Chapter 340, Divisions 12, 100-106, 109-111, 113, 135, and 142. For the purposes of this document, only those ORS or OAR requirements more stringent than the federal regulations will be cited, with the remainder of citations being the federal regulation. In addition, ORARNG facilities must be in compliance with the Uniform Fire Code with Oregon Amendments dated 1997.

Federal Regulations

In order to comply with the Federal Facilities Compliance Act, the ORARNG must manage its waste in accordance with (IAW) the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments (HSWA). Federal waste management regulations are codified in Title 40 of the Code of Federal Regulations (CFRs). This Plan provides procedures for complying with the following parts of 40 CFR:

- Part 260 through Part 272 for the regulation of HW
- Part 273 for the regulation of universal waste (UW)
- Part 279 for the regulation of used oil
- Part 112 for the regulation of Spill Prevention, Controls, and Countermeasures Plan (SPCCP)
- Part 268 for land ban restrictions

The ORARNG also must comply with the following:

- 49 CFR Parts 170 through 177 regarding HMs transportation
- 29 CFR Part 1910 regarding employee safety

Military Regulations

The ORARNG must comply with AR 200-1, *Environmental Protection and Enhancement*, which contains Army policy for HM, waste, and spill management. Specifically, this Plan provides procedures for complying with three chapters of AR 200-1: Chapter 3, “Oil and Hazardous Substances Spills,” Chapter 4, “Hazardous Material Management,” and Chapter 5, “Hazardous and Solid Waste Management.” ORARNG personnel must comply with Joint Service Manual – DLAI 4145.11/TM 38-410, titled *Storage and Handling of Hazardous Materials*. In addition, the ORARNG must comply with Department of Defense (DoD) Regulation 4500.9-R, known as the Defense Transportation Regulations (DTR), when transporting HM across public roadways.

1.4 Contractual Obligations

The ORARNG routinely contracts for services related to environmental compliance, such as waste transportation and disposal. These contracts may include requirements that are more stringent than the regulations. The ORARNG will comply with all HW disposal contractor restrictions that do not violate any regulation, order, ordinance, code, or other regulatory requirement. Environmental contracting will be conducted through the AGI-ENV.

1.5 Description of ORARNG Operations

The ORARNG provides organized, trained, and equipped units to execute assigned state and federal missions. The ORARNGs federal mission is to provide combat-ready forces to support the United States of America’s national security objectives. Secondly, the ORARNG protects life and property and preserves peace, order, and public safety under state authorities.

The ORARNG manages multiple facilities and equipment throughout Oregon. It manages surface maintenance facilities including the Oregon Sustainment Maintenance Site (OSMS), Unit Training Equipment Site (UTES), and Field Maintenance Shops (FMSs); as well as aviation maintenance facilities such as Army Aviation Support Facilities (AASFs); in addition to training sites and readiness centers throughout the state. The DEQ Hazardous Waste Identification Number for each ORARNG facility where they have been assigned is provided in Chapter 3, Managing Waste.

1.6 Responsibilities

Consult Oregon Army National Guard Regulations (ORARNGR) 200-1 and ORARNG Pam 200-1 to determine all applicable responsibilities. ORARNGR 200-1 and ORARNG Pam 200-1 are incorporated into this HMWSMP by reference.

1.7 Forms for Submitting Changes to this Plan

This section includes the following form:

- DA Form 2028

DA Form 2028

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS						Use Part II (<i>reverse</i>) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
For use of this form, see AR 25-30; the proponent agency is OAASA							
TO: (<i>Forward to proponent of publication or form</i>) (<i>Include ZIP Code</i>)				FROM: (<i>Activity and location</i>) (<i>Include ZIP Code</i>)			
PART I - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER						DATE	TITLE
ITEM	PAGE	PARA- GRAPH	LINE	FIGURE NO.	TABLE	RECOMMENDED CHANGES AND REASON	
* Reference to line numbers within the paragraph or subparagraph.							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

DA FORM 2028, FEB 74

REPLACES DA FORM 2028, 1 DEC 68, WHICH WILL BE USED.

USAPA V3.01

This page intentionally left blank.

Chapter 2. Managing Hazardous Materials

ORARNG personnel must properly maintain HM to minimize safety hazards and prevent spills. This chapter provides detailed guidance for managing HM including establishing an effective HM management program and establishing and maintaining storage areas for HM.

This chapter addresses the following topics:

2.1	General Requirements for Managing Hazardous Materials	page 7
2.2	Obtaining and Cataloging Material Safety Data Sheets	page 8
2.3	Determining Hazardous Material Compatibility	page 10
2.4	Maintaining and Extending Shelf Life	page 24
2.5	Shelf-life Types	page 27
2.6	Selecting Hazardous Material Storage Units	page 37
2.7	Setting Up Storage Areas	page 38
2.8	Stocking a Hazardous Material Storage Location	page 43
2.9	Maintaining and Tracking Inventory	page 45

Follow the procedures outlined in this chapter as a minimum recommendation for HM management. While some of the step-by-step procedures are BMPs and may not be required by regulation, they comprise a system that allows the user to prevent and/or reduce waste generation (i.e., pollution prevention), and ensure the safety of facility personnel working with HM.

2.1 General Requirements for Managing Hazardous Materials

Caution! The receipt, storage, issue, care, and preservation of ammunition and explosives at ORARNG facilities are beyond the scope of this Plan.

The following section details ORARNG specific recommendations for the management of HM in ORARNG facilities. These recommendations are a combination of requirements and BMPs for the effective management of HM.

- All containers of HM must be labeled, tagged, or marked with the identity of the material, appropriate hazard warnings, and the name and address of the manufacturer.
- **In all occupied buildings, quantities of flammable and combustible liquids in excess of 10 gallons but less than 50 gallons will be stored in appropriately rated HM storage cabinets.** Quantities less than 10 gallons are allowed to be stored outside of a cabinet when in approved containers. Quantities greater than or equal to 50 gallons will be stored on secondary containment pallets, in a HM storage room, or in a HM warehouse, all with adequate secondary containment.

- Fertilizers will not be stored in the same location as petroleum, oil, and lubricants (POLs).
- Oily rags and similar materials should be stored in metal or metal-lined containers equipped with tight fitting covers.
- Maintenance and operating practices will control leakage and spillage. Provisions shall be made and maintained for the detection of leakage. Spills will be cleaned up promptly and reported IAW the procedures discussed in Chapter 5, Spill Response Procedures.
- The storage of empty containers previously used for the storage of flammable or combustible liquids, unless free from explosive vapors, shall be stored as required for filled containers. Containers when emptied shall have the covers or plugs immediately replaced in openings.
- When processes or conditions exist where a flammable mixture could be ignited by static electricity, means shall be provided to prevent the accumulation of a static charge through bonding.

2.2 Obtaining and Cataloging Material Safety Data Sheets

Each facility must maintain a binder that contains material safety data sheets (MSDSs) for all HMs being stored at the facility. Each MSDS in the binder must be specific to each product by manufacturer and National Stock Number (NSN), if available. This section contains a recommended system for obtaining and cataloging required MSDSs.

- Step 1. Obtain an MSDS for each HM at the facility from the Hazardous Materials Information Resource System (HMIRS). HMIRS is located on the web at www.dlis.dla.mil/hmirs/. You will need to register and obtain a user identification login. If the MSDS is not available through HMIRS, try locating the MSDS by accessing www.siri.org. If the MSDS is not available through HMIRS or www.siri.org, then contact the manufacturer or product distributor (vendor) for the MSDS. If the MSDS is still not available, contact the Hazardous Waste Manager (HWM) or the ORARNG Safety Officer.
- Step 2. Assign a unique number to each MSDS and write the number on every container of that particular HM. While this system is not required by regulation, ORARNG prefers facilities to follow this step to manage MSDSs. This step allows you to place the MSDSs in a binder in sequential order, making them easier to find and easier to insert new MSDSs should new HMs be introduced to the facility. AGI-ENV recommends using the numbering system as shown on pages 2-32 through 2-39.

Example You use five HMs at your facility, and you have 10 containers of each, all of which are stored in a flammable materials storage cabinet which you label as 01. Starting with the HM stored on the left side (slot 01) of the top shelf of the cabinet, write a 01-01 on the MSDS and on all containers of that HM.

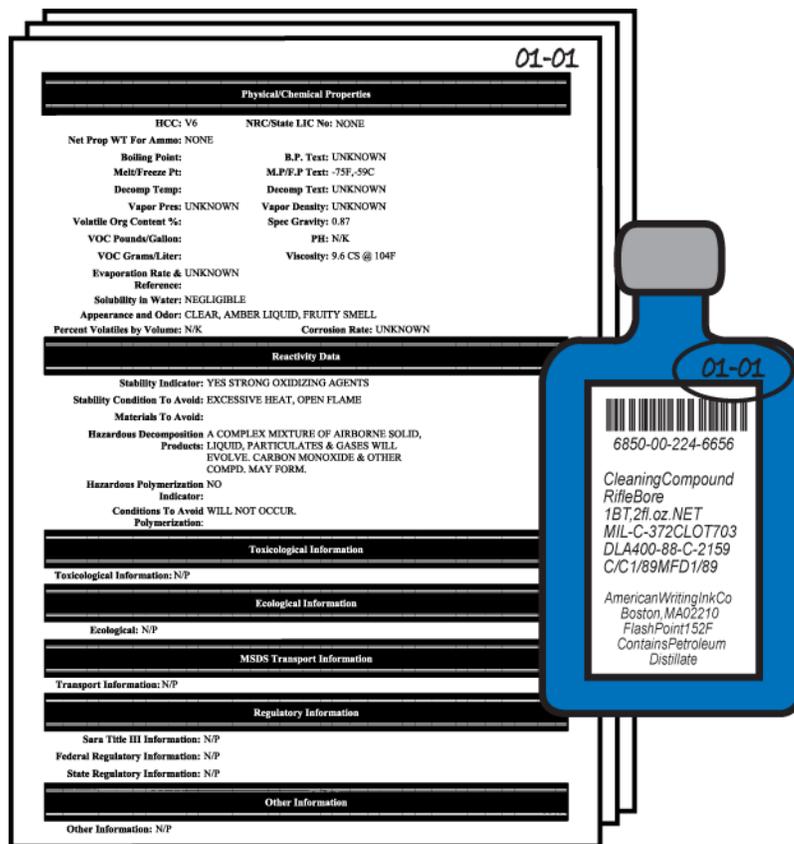


Figure 2-1. Example MSDS and HM Cataloging

- Step 3. In each HM storage area, place a sign indicating where the MSDS binder is kept for HMs in that storage area.
- Step 4. As a minimum, organize the MSDSs in a binder in a logical/sequential order (i.e. NSN, alphabetical, etc.). Create an index in the front of the binder(s) listing the MSDSs. Any method or order is acceptable as long as the MSDSs are organized and easily accessible. This binder must be centrally located and must be organized so a MSDS can be located quickly in case of a spill or exposure. The binder must be accessible at all times for review by employees or emergency personnel.
- Step 5. Once you complete a HM inventory as discussed at the end of this Chapter and in Chapter 5, you may also place a copy of the completed inventory form in the front of the central MSDS binder.
- Step 6. Remove MSDSs from the central binder no longer being used. Establish an archive MSDS binder to contain all MSDSs for HM no longer used at the facility. Place the archive binder in an accessible location, preferably by the Environmental Compliance Notebook (ECN). If the State Aviation Officer – Safety (SAO-S) maintains an archive of MSDSs for all activities throughout the state, the facility archive binder may not be required. Contact the SAO-S to determine if you need to maintain a separate binder.

Note Occupational Safety and Health Administration (OSHA) regulations require that lists of hazardous chemicals/materials used by each employee be maintained for at least 30 years, from the time the employee retired or stopped working at the facility. One of the ways to meet this requirement is to maintain the archive MSDSs binder discussed in Step 6.

2.3 Determining Hazardous Material Compatibility

Using the MSDSs, determine what types of materials can be stored together and what types must be segregated. The easiest way to determine compatibility is to use MSDSs generated from the HMIRS. To help determine what HMs can be stored together, the DoD has created the Hazardous Chemical Compatibility System. This section describes the basics of this system. Three methods for determining compatibility are discussed in this section.

Method 1: Determining Compatibility Using HMIRS MSDSs

When using the HMIRS MSDSs method for determining compatibility, complete the following steps:

- Step 1. From the MSDSs obtained through HMIRS, find the Hazard Characteristic Code (HCC) under Physical Chemical Properties. (Figure 2-2 shows the location of the HCC on the MSDS)

Note MSDSs for materials purchased directly from commercial vendors will not have HCCs; see method 2 to determine material compatibility.

- Step 2. Using the Storage Segregation Matrix (Table 2-1), find the HCC in the far left column (1).
- Step 3. Follow the row across the table and locate the * marking.
- Step 4. Follow the column up from the * marking to the Primary Segregation Letter (3). These letters stand for the following Hazard Storage Area Codes (HSACs):

A	Radioactive	C	Corrosive
D	Oxidizer	E	Explosive
F	Flammable	G	Gas, Compressed
L	Low Hazard (General Purpose)	P	Peroxide, Organic
R	Reactive	T	Poison

- Step 5. HM may only be stored with items that have the same Primary Segregation Letter. For example, store Fs with other Fs (flammables with other flammables) and Cs with other Cs (corrosives with other corrosives).
- Step 6. Return to the HMs HCC row and find the "Note" under the Secondary Segregation column (4). Go to the end of the table and read the definition of the note for any additional segregation requirements.
- Step 7. Stock HM lockers, rooms, buildings, and racks based on the container size and compatibility criteria.

Phenol	
Physical/Chemical Properties	
HCC: T3	NRC/State LIC No:
Net Prop WT For Ammo:	B.P. Text: 360F,182C
Bolling Point:	MSELP Text: 104F,40C
Melt/Freeze Pt:	Decomp Text: N/K
Decomp Temp:	Vapor Density: 3.24
Vapor Pres: .36	Spec Gravity: 1.071
Volatile Org Content %:	PH: N/K
VOC Pounds/Gallon:	Viscosity: N/P
VOC Grams/Liter:	
Evaporation Rate & N/K	
Reference:	
Solubility in Water: N/K	
Appearance and Odor: WHITE CRYSTALS.	
Percent Volatiles by Volume: N/K	Corrosion Rate: N/K
Reactivity Data	
Stability Indicator: N/P STRONG OXIDIZING AGENTS, STRONG BASES, STRONG ACIDS.	
Stability Condition To Avoid: MAY DISCOLOR ON EXPOSURE TO LIGHT.	
Materials To Avoid:	
Hazardous Decomposition TOXIC FUMES OF:CO, CO2.	
Products:	
Hazardous Polymerization N/P	
Indicator:	
Conditions To Avoid NONE SPECIFIED BY MANUFACTURER.	
Polymerization:	
Toxicological Information	
Toxicological Information: N/P	
Ecological Information	
Ecological: N/P	
MSDS Transport Information	
Transport Information: N/P	
Regulatory Information	
Sara Title III Information: N/P	

HCC

Figure 2-2. MSDS Showing HCC

Example

A facility has a HM with a HCC of F6 (a corrosive alkali that is flammable) and a HM with an HCC of F7 (a corrosive acid that is flammable). Because they are both Fs, it first appears that they could be stored together. However, they both have a Secondary Segregation Note L, which states, "Separate from other flammables and flammables with secondary hazards by at least one four-foot aisle width." As shown in the figure below a permanent barrier may be used in lieu of the prescribed aisle-width.

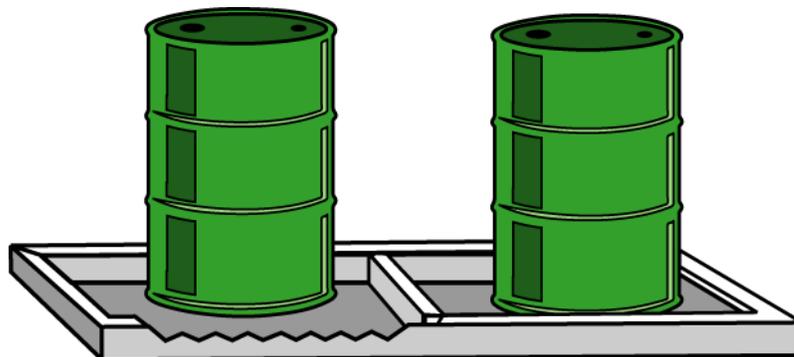


Figure 2-3. Segregated Drums

Table 2-1. Storage Segregation Matrix

HC C (1)	Hazard Characteristics Group Name (2)	Primary Segregation by Hazard Storage Area Code (3)										Secondary Segregation (4)
		A	C	D	E	F	G	L	P	R	T	
A1	Radioactive, Licensed	*										Note A
A2	Radioactive, License Exempt	*										Note A
A3	Radioactive, License Exempt, Authorized	*										Note A
B1	Alkali, Corrosive Inorganic		*									Note B
B2	Alkali, Corrosive Organic		*									Note C
B3	Alkali, Low Risk							*				Note F
C1	Acid, Corrosive Organic		*									Note D
C2	Acid, Corrosive & Oxidizer, Inorganic		*									Note E
C3	Acid, Low Risk							*				Note F
C4	Acid, Corrosive & Oxidizer, Organic		*									Note D
C5	Acid, Corrosive & Oxidizer, Organic		*									Note E
D1	Oxidizer			*								None
D2	Oxidizer & Poison			*								Note G
D3	Oxidizer & Corrosive Acidic			*								Note G
D4	Oxidizer & Corrosive Alkali			*								Note G
E1	Explosive, Military				*							
E2	Explosive, Low Risk							*				Note A
F1	Flammable Liquid DOT PG I, OSHA IA					*						Note J
F2	Flammable Liquid DOT PG II, OSHA IA					*						Note J
F3	Flammable Liquid DOT PG III, OSHA II					*						Note J
F4	Flammable Liquid DOT PG III, OSHA II					*						Note J
F5	Flammable Liquid & Poison					*						Note L
F6	Flammable Liquid & Corrosive, Alkali					*						Note L
F7	Flammable Liquid & Corrosive, Acidic					*						Note L
F8	Flammable Solid					*						Note K
G1	Gas, Poison (Nonflammable)							*				Note M

HC C (1)	Hazard Characteristics Group Name (2)	Primary Segregation by Hazard Storage Area Code (3)										Secondary Segregation (4)
		A	C	D	E	F	G	L	P	R	T	
G2	Gas, Flammable						*					Note N
G3	Gas, Nonflammable						*					Note P
G4	Gas, Nonflammable, Oxidizer						*					Note R
G5	Gas, Nonflammable, Corrosive						*					Note S
G6	Gas, Poison, Corrosive (Nonflammable)						*					Note T
G7	Gas, Poison, Oxidizer (Nonflammable)						*					Note U
G8	Gas, Poison, Corrosive (Nonflammable)						*					Note V
G9	Gas, Poison, Flammable						*					Note W
K1	Infectious Substance										*	Note X
K2	Cytotoxic Drugs										*	Note Y
M1	Magnetized Material							*				None
N1	Not Regulated as Hazardous							*				None
P1	Peroxide, Organic, DOT Regulated								*			None
P2	Peroxide, Organic (Low Risk)								*			None
R1	Reactive Chemical, Flammable									*		Note Z
R2	Water Reactive Chemical									*		Note AA
T1	DOT Poison – Inhalation Hazard										*	None
T2	UN Poison, Packing Group I										*	None
T3	UN Poison, Packing Group II										*	None
T4	UN Poison, Packing Group III							*				Note BB
T5	Pesticide, Low Risk							*				None
T6	Health Hazard							*				None
T7	Carcinogen (OSHA, NTP, IARC)										*	Note CC
V1	Miscellaneous Hazardous Materials – Class 9							*				None
V2	Aerosol, Nonflammable					*						Note EE

HC C (1)	Hazard Characteristics Group Name (2)	Primary Segregation by Hazard Storage Area Code (3)										Secondary Segregation (4)	
		A	C	D	E	F	G	L	P	R	T		
V3	Aerosol, Flammable					*							Note EE
V4	DOT Combustible Liquid, OSHA IIIA					*							None
V5	Hi-Flash Point Liquids, OSHA IIIB							*					None
V6	Petroleum Products							*					None
V7	Environmental Hazard							*					None
Z1	Article Containing Asbestos							*					None
Z2	Article Containing Mercury							*					None
Z3	Article Containing Polychlorinated Biphenyls (PCB)							*					None
Z4	Article, Battery, Lead Acid, Nonspillable							*					None
Z5	Article, Battery, Nickel Cadmium, Nonspillable							*					None
Z6	Article, Battery, Lithium									*			Note DD
Z7	Article, Battery, Dry Cell							*					None

Definition of Notes

- NOTE A Security Storage – must be well ventilated with limited access.
- NOTE B Inorganic Alkali Storage – store away from acids by at least one 4-foot aisle width and away from organ at least one 4-foot aisle width.
- NOTE C Organic Alkali Storage – store away from acids by at least one 4-foot aisle width and away from inorganic alkalis by at least one 4-foot aisle width.
- NOTE D Inorganic Acid Storage – store away from alkalis (caustics) by at least one 4-foot aisle width and away from organic acids by at least one 4-foot aisle width. Separate from other acids with subsidiary risk labels by at least one 4-foot aisle width.
- NOTE E Organic Acid Storage – store away from alkalis (caustics) by at least one 4-foot aisle width and away from inorganic acids by at least one 4-foot aisle width. Separate from other acids with subsidiary risk labels by at least one 4-foot aisle width.
- NOTE F Further separate into Acid and Alkali storage within the low hazard storage area to keep potentially incompatible products from mixing.
- NOTE G Separate from other oxidizers and oxidizers with secondary hazards by at least one 4-foot aisle width.
- NOTE H Magazine Storage.
- NOTE J Segregate into Flammable Liquid storage separate from flammable solids by at least one 4-foot aisle width.

Definition of Notes

- NOTE K Segregate into Flammable Solid storage separate from flammable liquids by at least one 4-foot aisle width.
- NOTE L Separate from other flammables and flammables with secondary hazards by at least one 4-foot aisle width.
- NOTE M Further segregate into Poison Gas storage within compressed gas area.
- NOTE N Further segregate into Flammable Gas storage within compressed gas area.
- NOTE P Further segregate into Non-flammable Gas storage within compressed gas area.
- NOTE R Further segregate into Oxidizer Gas within the Non-flammable Gas storage that is within the compressed gas area.
- NOTE S Further segregate into Corrosive Gas within the Non-flammable Gas storage that is within the compressed gas area.
- NOTE T Further segregate into Corrosive Gas within the Poison Gas storage that is within the compressed gas area.
- NOTE U Further segregate into Oxidizer Gas within the Poison Gas storage that is within the compressed gas area.
- NOTE V Further segregate into Flammable Gas within the Poison Gas storage that is within the compressed gas area.
- NOTE W Further segregate into Corrosive and Oxidizer Gas within the Poison Gas storage that is within the compressed gas area.
- NOTE X Further segregate into Biomedical storage within the Poison storage area.
- NOTE Y Further segregate into Medical Security storage within the Poison storage area.
- NOTE Z Further segregate into Spontaneously Combustible storage within the Reactive storage area.
- NOTE AA Should not store in areas protected with water sprinkler system. Fire protection should be non-water based.
- NOTE BB Store away from food.
- NOTE CC Further segregate within Poison storage area may be necessary if secondary hazards exist (i.e. flammable, corrosive, etc.).
- NOTE DD Separate from other products within the Reactive storage area.
- NOTE EE Store aerosols from flammables by placing in separate room or barrier such as floor to ceiling wire mesh, chain link fence, etc. to protect personnel from aerosols that can become self-propelled projectiles.

Method 2: Determining HCC and Compatibility Using DOT Hazard Labels

- Step 1. If a HMIRS generated MSDS is not available, look on the container or the box it was shipped in for a DOT Hazard Label.

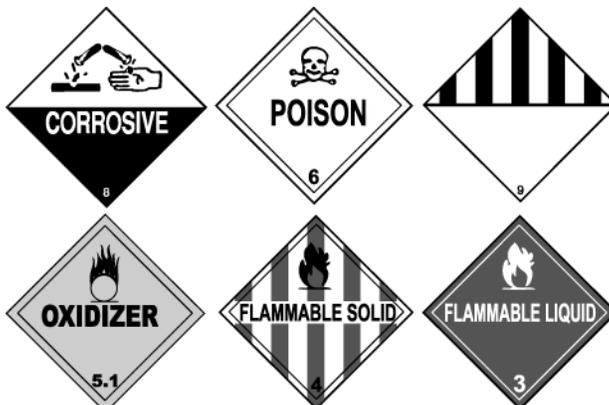


Figure 2-4. Sample DOT Labels

- Step 2. If a DOT label is present, use Table 2-2 on the following page to obtain an Interim HCC.
- Step 3. Once you have the Interim HCC, go back to Table 2-1 and follow Steps 2 through 7 under Method 1 to determine compatibility.

Figure 2-5 can also be used as an aid to determine storage compatibilities using DOT labels and Interim HCCs. The figure shows those compatible items that CAN be stored with the Interim HCC as determined by using the label.

Example A facility has a HM with a 5.1 Oxidizer DOT label and a HM with a 5.2 Organic Peroxide label. Because they are both oxidizers, or Ds on the HCC table, it first appears that they could be stored together. However, a secondary segregation note appears on the HCC Table for the organic peroxide. Note G states “Separate from other oxidizers and oxidizers with secondary hazards by at least one 4-foot aisle width.”

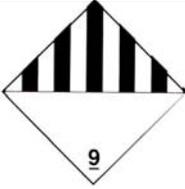
Table 2-2. DOT Labels

DOT Label	DOT Label Name	Interim HCC	
		Primary	Secondary
	Explosive 1.1	E1	Magazine

DOT Label	DOT Label Name	Interim HCC	
		Primary	Secondary
	Explosive 1.2	E1	Magazine
	Explosive 1.3	E1	Magazine
	Explosive 1.4	E2	Security
	Explosive 1.5	E2	Security
	Explosive 1.6	E2	Security
	Poison Gas	G1	Poison Gas Cylinder
	Flammable Gas (Cylinder)	G2	Flammable Gas Cylinder

DOT Label	DOT Label Name	Interim HCC	
		Primary	Secondary
	Flammable Gas (Aerosol Non-refillable tank or Canister)	V3	Aerosol Containers
	Non-Flammable Gas	G3	Nonflammable Gas Cylinder
	Flammable Liquid	F1-F4	Flammable Liquid
	Flammable Solid	F8	Flammable Solid
	Spontaneously Combustible	R1	Spontaneously Combustible
	Dangerous When Wet	R2	Dangerous When Wet, No Water Sprinklers
	Oxidizer	D1	None Required

DOT Label	DOT Label Name	Interim HCC	
		Primary	Secondary
	Organic Peroxide	P1	None Required
	Poison	T2	None Required
	Harmful Keep Away From Food	T4	Away From Food
	Infectious Substance	K1	Biomedical
	Radioactive I	A1	Security
	Radioactive II	A1	Security
	Radioactive III	A1	Security

DOT Label	DOT Label Name	Interim HCC	
		Primary	Secondary
	Corrosive	C1, C2, C4, C5 (Acid)	Acid
	Corrosive	B1, B2 (Alkali)	Alkali
	Class 9	V1	None Required
Not Available	Magnetized Material	M1	None Required

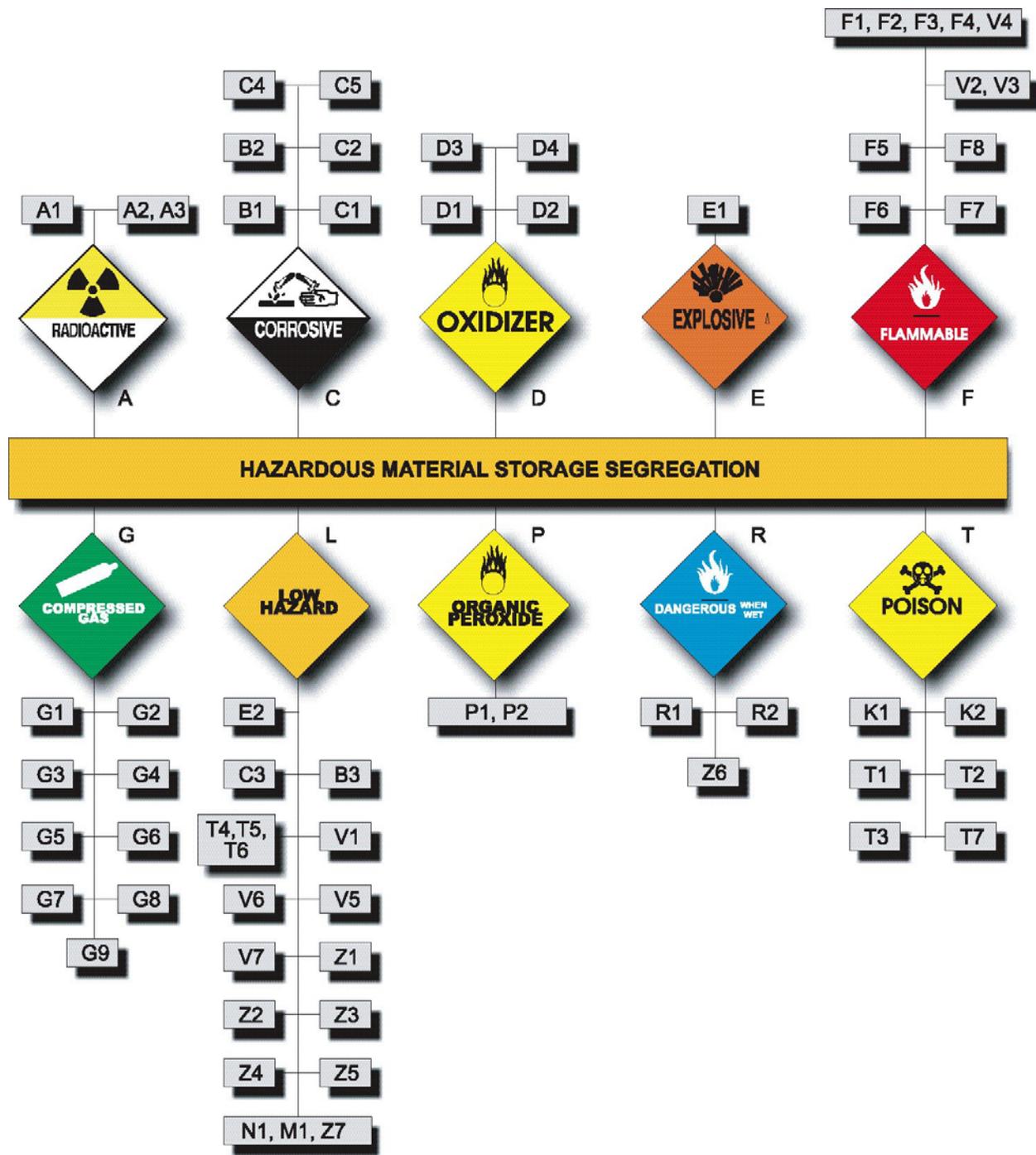


Figure 2-5. Storage Segregation Using DOT Labels

Method 3: Determining HCC and Compatibility Using OSHA Precautionary Labels

Step 1. If a HMIRS generated MSDS is not available, look on the HM container for an OSHA precautionary label. Precautionary labels start with signal words followed by specific handling precautions. The three “signal words” used are Danger, Warning, and Caution. These signal words have the following meanings.

CAUTION! - Material will burn but is not extremely flammable and/or material is an irritant.

WARNING! - Material is flammable and will burn given the right circumstances and/or the material is toxic enough to cause sickness or severe irritation.

DANGER! - Material is either extremely flammable and will ignite easily and/or material is toxic enough to cause serious injury or death.

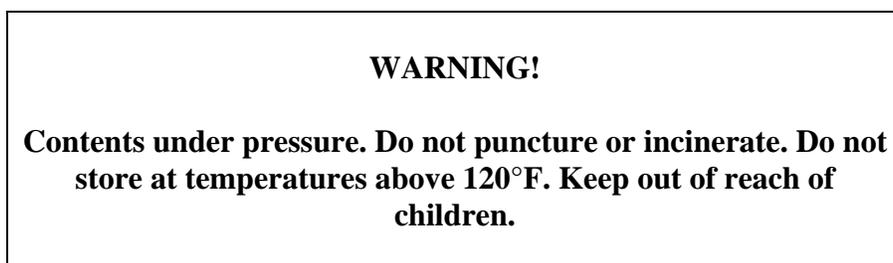


Figure 2-6. Example Precautionary Label

Step 2. If a precautionary label is present, use Table 2-3 on the following page to obtain a Suggested Temporary HCC. Match the label with the “Signal Word” and “Examples of Statements of Hazard” in the first two columns of the table. If the label doesn’t exactly match the words in Table 2-3, select the closest match. Always choose the greatest threat when attempting to match.

Step 3. Once you have the Suggested Temporary HCC from column 3, go back to Table 2-1 and follow Steps 2 through 7 under Method 1 to determine compatibility.

Example A facility has a HM, an aerosol can of WD-40, with a precautionary label that states “Danger: Extremely Flammable! Contents under pressure. Harmful or fatal if swallowed.” Based on this label and using Table 2-3, the temporary HCC for this product could be T2, T3, or F1. By comparing the actual material with the information provided by Table 2-1, the most appropriate code would most likely be F1, although V3 would also be appropriate because the HM is an aerosol can of flammable liquid.

Table 2-3. Precautionary Labels

Signal Word	Examples of Statements of Hazard	Suggested Temporary HCC	Recommended Primary Storage Area	Recommended Secondary Storage Area
DANGER!	MAY BE FATAL IF SWALLOWED	T2	Poison	None Required
WARNING!	HARMFUL IF SWALLOWED	T3	Poison	None Required
WARNING!	HARMFUL IF SWALLOWED	T4	Low Hazard *	Away From Food
DANGER!	MAY BE FATAL IF ABSORBED THROUGH SKIN	T2	Poison	None Required
WARNING!	HARMFUL IF ABSORBED THROUGH SKIN	T6	Low Hazard *	None Required
DANGER!	CAUSES (SEVERE) ** BURNS	C1, C2, C4, C5	Corrosive	Acid
DANGER!	CAUSES (SEVERE) ** BURNS	B1, B2	Corrosive	Alkali
DANGER!	EXTREMELY FLAMMABLE	F1	Flammable	Flammable Liquid
WARNING!	FLAMMABLE	F2, F3	Flammable	Flammable Liquid
WARNING!	FLAMMABLE	F8	Flammable	Flammable Solid
CAUTION!	COMBUSTIBLE	F4	Flammable	Flammable Liquid
CAUTION!	COMBUSTIBLE	V4	Flammable	None Required
DANGER!	EXTREMELY FLAMMABLE, CATCHES FIRE IF EXPOSED TO AIR	R1	Reactive	Spontaneously Combustible
DANGER!	STRONG OXIDIZER, CONTACT WITH OTHER MATERIALS MAY CAUSE FIRE	D1	Oxidizer	None Required
DANGER!	MAY BE FATAL IF INHALED	T1	Poison	None Required
WARNING!	HARMFUL IF INHALED	T2	Poison	None Required
WARNING!	MAY CAUSE ALLERGIC RESPIRATORY REACTION	T6	Low Hazard *	None Required
CAUTION!	(VAPOR GAS) ** REDUCES OXYGEN AVAILABLE FOR BREATHING	T6	Low Hazard *	None Required

Signal Word	Examples of Statements of Hazard	Suggested Temporary HCC	Recommended Primary Storage Area	Recommended Secondary Storage Area
WARNING!	CAUSES EYE IRRITATION	T6, C3, C4	Low Hazard *	None Required
WARNING!	CAUSE IRRITATION	T6, C3, C4	Low Hazard *	None Required
WARNING!	MAY CAUSE ALLERGIC SKIN REACTION	T6, C3, C4	Low Hazard *	None Required
Please note that "None Required" means no additional storage requirements.				
* Material bearing precautionary label text will not be assigned a Low Hazard (General Purpose) location without no and approval by the AGI-ENV.				
** Enter proper term as appropriate.				

2.4 Maintaining and Extending Shelf Life

An effective waste-minimization program includes active life-cycle management of HMs before they turn into HW. One of the best and highest payback methods of doing that is to establish a good shelf-life extension program. Prior to discussing effective shelf-life management it is important to understand the difference between shelf-life and service life.

Note: HMs purchased locally that do not have an expiration date are not shelf-life items and can be used indefinitely or until the item becomes unusable.

Shelf Life versus Service Life as defined in DoD 4140.27 / DLA J-373

Shelf life is the total period of time that an item may remain in the supply storage system and still remain suitable for issue. It begins with the date of manufacture, cure, assembly, or pack. The shelf-life period ends with the date the material must be used (expiration date) or subjected to inspection/test/restorative action. A shelf-life item is an item of supply having deteriorative or unstable characteristics to the degree that a storage-time period must be assigned to ensure that it will perform satisfactorily while in service.

Service life is a general term used to quantify the average or standard life expectancy of an item or equipment while in use. When a shelf-life item is unpacked and introduced to mission requirements, installed into an intended application, or held as bench stock (or daily use), shelf-life management stops and service life begins. An item's shelf-life may have expired but the materials service life may not be complete. The end user must determine when the service life is complete through inspection of the item to determine if it is still useable and if the application of the material in use is appropriate.

Service life is not to be confused with the shelf-life term "serviceable" which relates to supply condition codes. Opening a container negates shelf-life and triggers "service-life" for that specific container. Once opened deterioration begins to accelerate even faster, users need to

actively inspect containers that have been opened. Neither DoD SLES inspection criteria nor Quality Status List (QSL) test results may be used to extend open containers.

HM that falls into service-life needs only to be visually inspected.

Accessing the Defense Logistics Agency (DLA) Shelf-life Website and Obtaining Additional Information

Note: Shelf-life is for HM that is in storage – and has never been opened.

The DoD has instituted a shelf-life program administered by the DLA and all information regarding this program is available on the DLA Shelf-life website. Through this website, the Material Quality Control Storage Standard (MQCSS) and the QSL websites can be accessed to properly obtain shelf-life information for most products distributed through the Federal Supply System. There are two options for accessing the MQCSS and QSL websites both of which can be obtained through the DoD Shelf-life Program website.

Using a **DoD Reserve Component Automated System (RCAS) computer** with a DLA recognized .mil internet address, you can directly access the shelf life website at **<https://today.dla.mil/j-3/shelflife/>**. Once you enter the site, click on the Extension Program (SLES) tab as shown in Figure 2-7 (shown as item 1 - Click here to begin). The information presented on the public and DoD versions of the website from this point on are identical. Figure 2-7 identifies the various options for navigation available once you enter the site including accessing the QSL (shown as item 2), the MQCSS (shown as item 3), the test labs used for product testing (shown as item 4), and a location for obtaining shelf-life extension forms (shown as item 5).

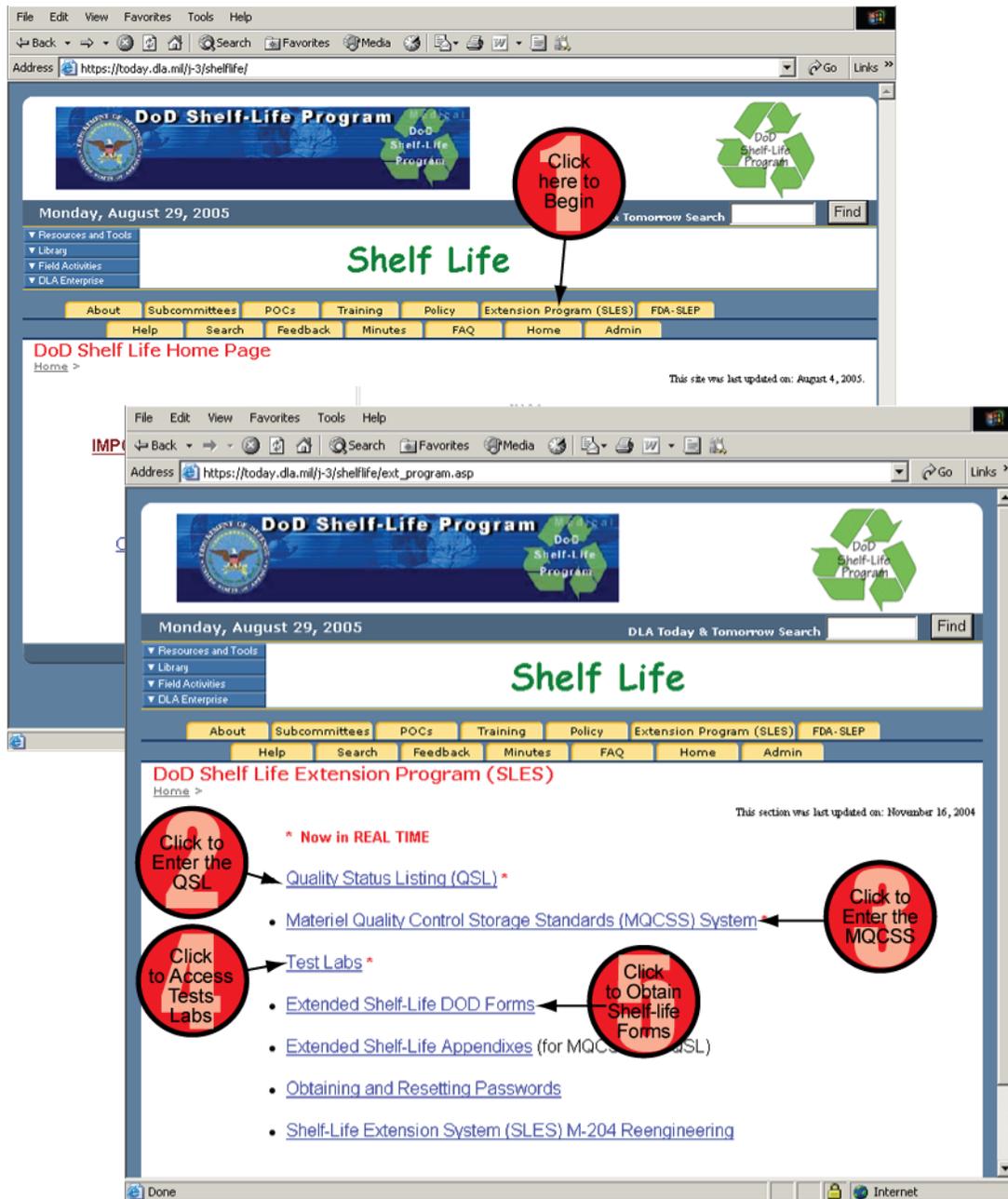


Figure 2-7. DoD Shelf-life Website Entrance

A variety of other information is available within the DLA website including complete descriptions of shelf-life codes, supply condition codes, as well as the DoD Shelf-Life Program Policy Documents. For more information on the DoD Shelf-life Program, DoD 4140.27-M and supplemental shelf-life information is found in DLAR 4155.37:MQCSS. Points of contact for shelf-life questions may be found at http://www.shelflife.hq.dla.mil/Public_POCs.asp

2.5 Shelf-life Types

To determine if an item is a shelf- or non-shelf-life item, look up the Shelf-Life Code (SLC) on the Federal Logistics Data System (FedLog). All shelf-life items are classified as one of the following types:

Type I Materials

Type I materials have an alphabetical SLC and an expiration date. Type I materials are not extendible. Type I materials are required to be marked with either the date manufactured, date cured, date assembled, or date packed (apply one as appropriate), as well as the expiration date. Table 2-4 shows the Type I Material Shelf-Life Codes and shelf-life period.

Table 2-4. Type I Material Shelf-life Codes

Shelf-life Code	Shelf Life (Months)	Shelf-life Code	Shelf Life (Months)
A	1	N	27
B	2	P	30
C	3	Q	36
D	4	R	48
E	5	S	60
F	6	T	84
G	9	U	96
H	12	V	108
I	72	W	60
J	15	X	CPC >60
K	18	Y	180
L	21	Z	240
M	24		

DoD policy requires that Type I materials be used or disposed of within 30 days of the expiration date. See Chapter 4 for turn-in instructions. One exception is Type I medical items, which may be extended if they have been accepted as candidates for the DoD Shelf-life Extension Program.

Type II Materials

Type II materials (90% of shelf-life material) have a numeric SLC and a test/inspect date marked on the container. Type II materials are extendible. Every effort must be made to extend the life of the material until it is used. Type II items can be extended by visual inspection and/or laboratory analysis. Table 2-5 shows the Type II material SLCs and the shelf-life period.

Table 2-5. Type II Material Shelf-life Codes

Shelf-life Code	Shelf Life (Months)	Shelf-life Code	Shelf Life (Months)
0	Non-Deteriorative	5	18
1	3	6	24
2	6	7	36
3	9	8	48
4	12	9	60

Extending Type II Material Using Laboratory Analysis - QSL

Step 1. Visually inspect the containers. When conducting a visual inspection check for the following:

- Leakage, broken glass
- Rodent/insect infestation
- Hardening/liquefying
- Bulging containers
- Rust, caking, and powdering
- Liquid evaporation/condensation
- Proper label

If any containers are not in good condition, process them for disposal IAW Chapter 4.

Step 2. Obtain extension information from the QSL.

Quality Status List - The DoD Shelf-life website contains information concerning laboratory testing certification required to extend the shelf life on some items. This information is found in the QSL. The QSL contains the results of tests by DoD/GSA commercial physical science laboratories on Type II shelf-life material.

The test determines whether or not the material is unstable or has experienced any deterioration, rendering it unusable. The results of these tests can be used to extend the shelf life of material on hand. In order for the test results on one unit of material to be applied to other units in storage, the material must share the same unique identifiers of NSN, contract, and lot/batch identification. The QSL will provide the last test date and the date the next test is due. Refer to Table 2-5 for a description of the SLCs. To use the QSL, follow the screenshots shown on the next two pages, Figures 2-8 and 2-9.

The first page of screenshots shows how to enter the QSL website. After accessing the shelf-life program website (described in detail on pages 2-19 through 2-20), select the QSL hyperlink (item 1 on Figure 2-8). That will bring you to a second page that contains all QSL products in a single list. You may review the entire list to find the item you are researching, or you can conduct a search to narrow the list. To conduct a search, click on the search button (item 2) which will bring up the search page. Choose the category of search item that you would like to use, typically NSN (shown as item 3), and enter the category information (shown as item 4).



Figure 2-9 shows how to retrieve shelf-life information from the QSL website using an NSN. The NSN used is for brake fluid, automotive as used in the MQCSS example. Item 1 shows the selection of NSN, item 2 shows the entered NSN information, and item 3 shows where to click to find the shelf-life information.

It is important to note that the QSL website provides a simple list of all available records. The search functions shown in the screenshots transport you to the records that match the NSN you enter. Ensure the NSN you select is for the actual product you are researching. Verify that the contract number, lot, and batch associated with the NSN you are researching match between the actual item and the website.

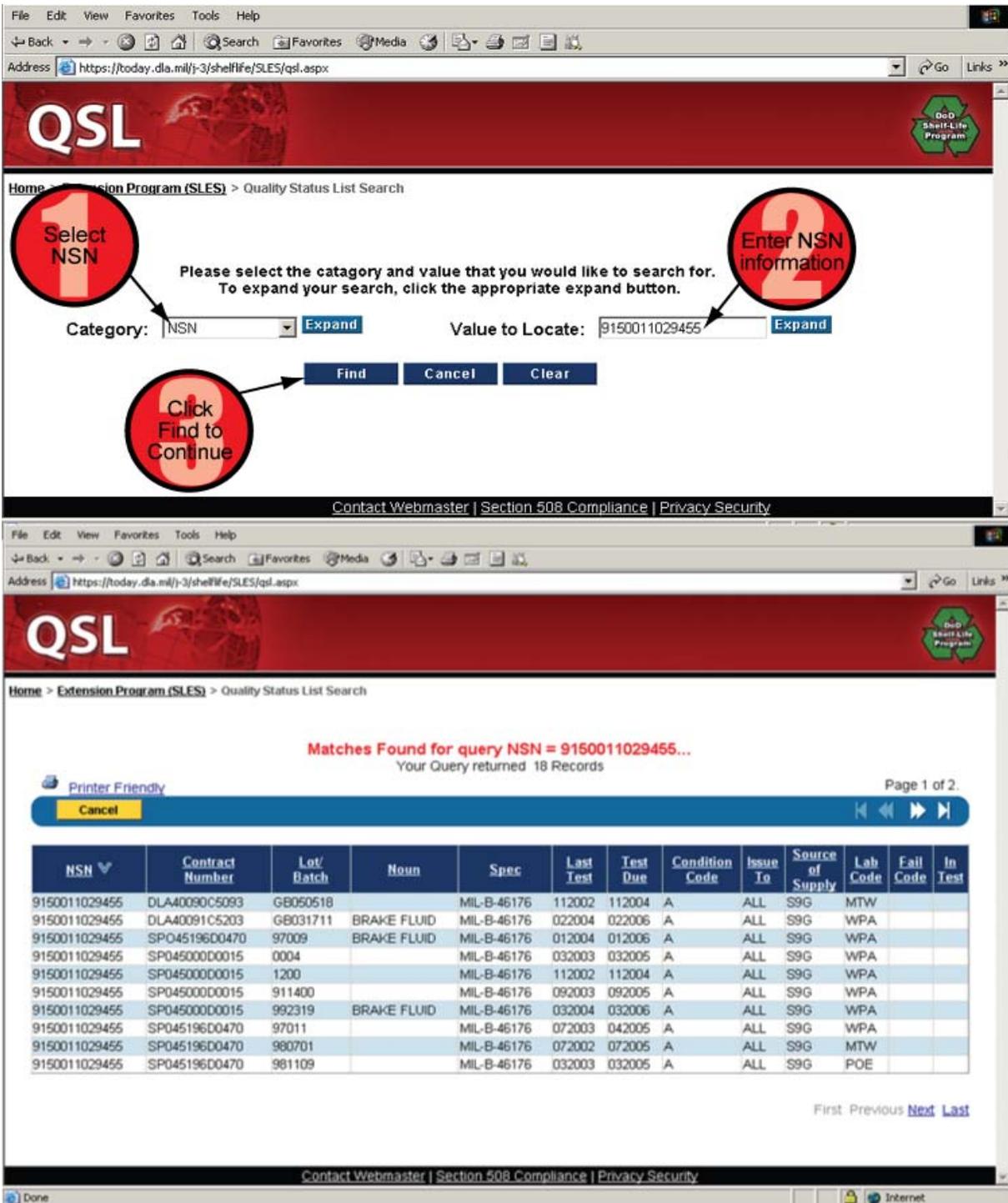


Figure 2-9. QSL Example Screenshots

Extending Type II Materials Using Visual Inspection – FedLog / MQCSS

Most items can be extended through visual inspections. Anyone can conduct visual inspections for items not requiring certified test results. The extension time information used to establish the next test/inspection date can be obtained from FedLog or the MQCSS. Refer to <http://www.dlis.dla.mil/Fedlog/Subscription/> for information on obtaining a FedLog subscription.

To extend Type II shelf-life items, follow these steps:

Step 1. Visually inspect the containers. When conducting a visual inspection check for the following:

- Leakage, broken glass
- Rodent/insect infestation
- Hardening/liquefying
- Bulging containers
- Rust, caking, and powdering
- Liquid evaporation/condensation
- Proper label

If any containers are not in good condition, process them for disposal IAW Chapter 4.

Step 2. Obtain extension information from either FedLog or MQCSS.

FedLog – Use FedLog to obtain the shelf-life extension information. Once in FedLog, enter the NSN. When the screen comes up for the item, find the Shelf-life Code indicated by “SLC.” Click on the “contents help” icon (arrow with a question mark) and drag it to the code, or highlight the information in the SLC column and click the right mouse button. A table will appear that indicates if the item is a Type I or Type II, as well as the material’s shelf-life period. There is often a code associated with the item status (a letter is indicative of a Type I item, a number is indicative of a Type II item). The screen shot on the following page, Figure 2-10, provides an illustration. In this case, brake fluid is a Type II item with a 24-month shelf life.

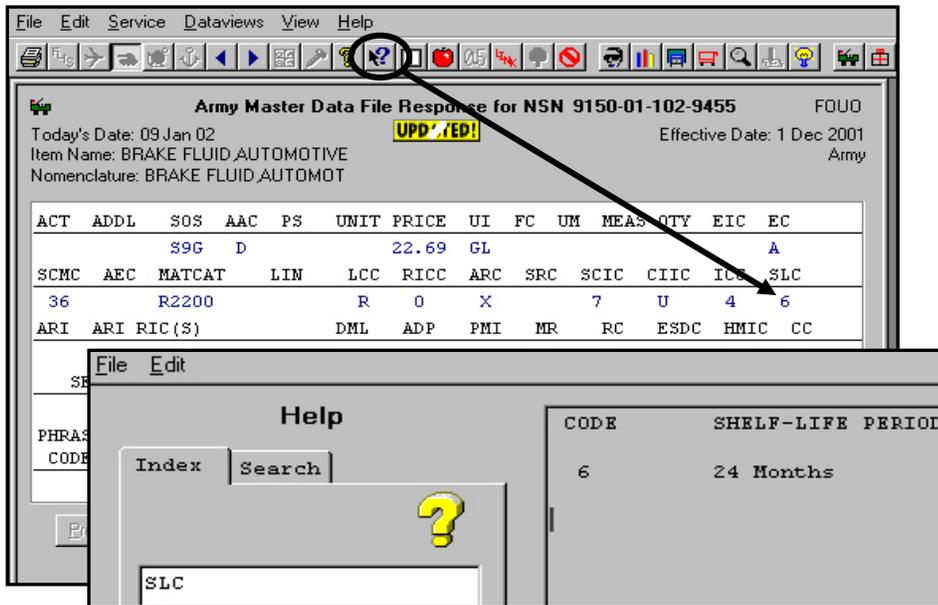


Figure 2-10. FedLog Example

MQCSS – The M-204 MQCSS is a database that implements uniform storage standards for Type II (extendible) NSNs. While the MQCSS was designed for wholesale managing activities, the ORARNG can use it to obtain shelf-life information.

Access the DoD Shelf-life website, and follow the screenshots on the following page, Figure 2-11. Click on the MQCSS link (item 1), and select the MQCSS web application on the page that appears (item 2).

Then, select “ALL” in the Table selection drop-down menu (item 3) and either the NSN or the item name in the Sort by selection drop-down menu (item 4) as shown in the pages that appear. Enter the NSN or item name (item 5), and click the Search button. On the page that appears, click on the NSN you are searching for and a page will appear that shows the shelf-life information for the product.

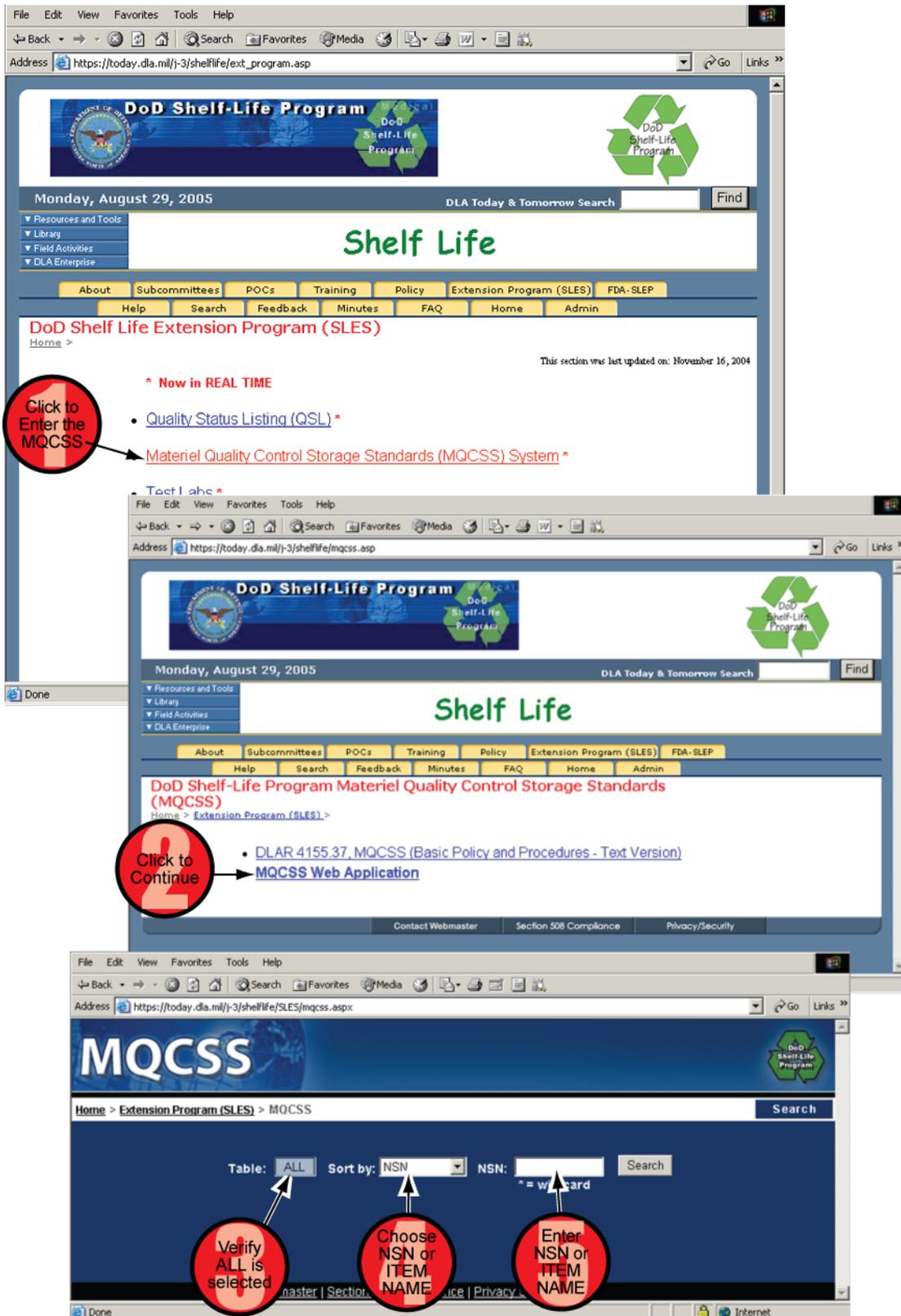


Figure 2-11. MQCSS Web Application

Figure 2-12 shows an example of a complete MQCSS search using a NSN for brake fluid, automotive. Item 1 shows the selection of the NSN instead of the item name and the NSN that has been entered. After clicking on the search button to continue (item 2), the page appears showing the highlighted NSN of the desired item. The hyperlinked NSN is clicked (item 3) to reveal a new screen that contains the shelf-life information for that product. This is shown in the bottom screenshot of Figure 2-12.

Visually inspect the container no later than the first inspection date which is equal to the manufacture date, found on the container, plus the number of months indicated in the shelf-life months (SLF LIFE MONTH) field. The container may be inspected before that time but not before the first inspection month field (FIRST INSP MONTH). The next inspection date is the original inspection due date plus the number of months indicated in the Shelf-life Month field.

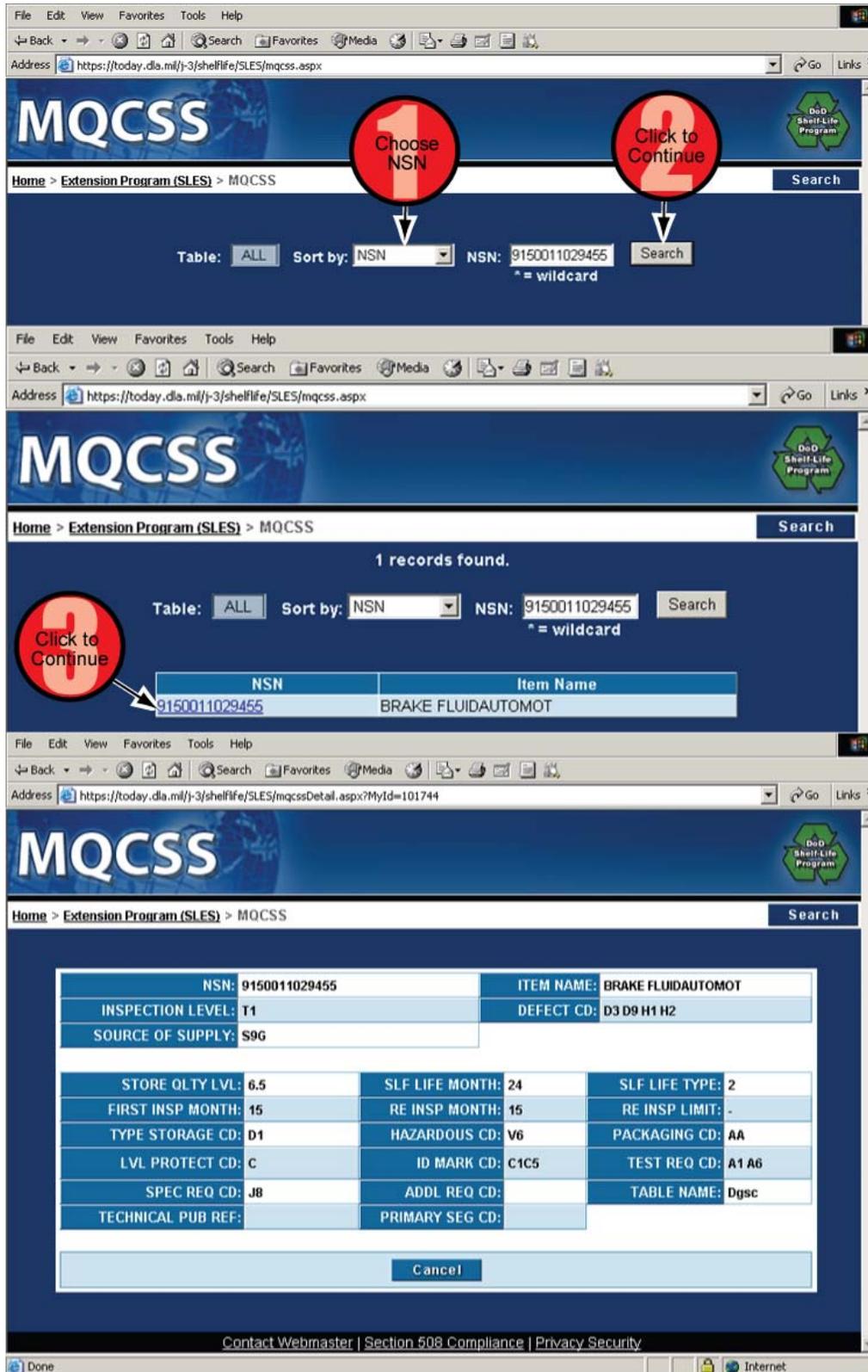


Figure 2-12. MQCSS Example Search Using an NSN

Completing Shelf-life Extension Notice Information

Once you have determined if the item can be extended using either the QSL, MQCSS or FedLog, mark the following data on the container with a shelf-life extension sticker or, if space allows, directly on the container with a permanent marker. Figure 2-13 shows an example of a shelf-life extension notice label obtained from the DoD Shelf-Life program website. Similar labels may be used as long as the same information is recorded on the label.

- Inspection/test date (day visually extended or QSL date)
- Next inspection/test date
- Authority (QSL, MQCSS, or FedLog)
- Initials of person who inspected and extended item

SHELF-LIFE EXTENSION NOTICE	
<small>PER DOD 4140-27M, CONTAINERS REQUIRE REMARKING WITH EXTENDED SHELF-LIFE DATA. UNITS OF ISSUE REQUIRE RE-MARKING UPON OPENING CONTAINER.</small>	
NSN:	_____
CONTRACT NUMBER:	_____
LOT/BATCH NUMBER:	_____
DATE TESTED:	_____
NEXT INSP/TEST DATE:	_____
AUTHORITY:	_____
	<small>(QSL, MQCSS, OTHER)</small>
INSPECTED BY:	_____
	<small>(ACTIVITY AND INSPECTORS NAME OR NUMBER)</small>

DD FORM 2477-3 MAR 1999 Previous edition may be used until supply is exhausted

Figure 2-13. Shelf-life Extension Notice Label

2.6 Selecting Hazardous Material Storage Units

Select the appropriate type of storage unit for the HM.

- For small quantities of commonly used HM, use storage lockers.
- For large quantities of HM, use HM structures such as storage rooms, buildings, or storage racks with built-in secondary containment.

As a BMP, store daily quantities of HMs, not to exceed one-gallon containers (e.g., containers of Break-Free™ and paint), in lockers. Maintain larger containers (e.g., 5-gallon diesel cans and 55-gallon drums) in rooms, buildings, or racks.

WARNING! DO NOT store tools or personal items in any HM storage location.

DO NOT store organic combustible materials, such as cardboard, paper, or rags with flammable HM.

DO NOT store flammable or reactive HM within 50 feet of the property boundary.

DO NOT store HM in trailers and vehicles without secondary containment, personal wall lockers, near floor drains, or in areas with high foot or vehicle traffic.

DO NOT store or consume food in any HM storage location.

DO NOT use wood to construct additional or replacement shelving.

2.7 Setting Up Storage Areas

Whether checking in new products or maintaining current stock, HMs must be properly stored to minimize hazards to personnel and property. HMs can be stored in storage lockers/cabinets, storage rooms, warehouses, or racks. In addition, there are special guidelines for storing compressed gases.

Storage Lockers

Maintain daily use amounts of commonly used HMs, such as brake cleaner, adhesives, aerosol cans, etc., in storage lockers in the work area. All lockers should be National Fire Protection Association (NFPA) approved storage lockers.

CAUTION! DO NOT store propane or ether starter cylinders in storage lockers with other flammable or combustible materials.

DO NOT store flammable or combustible liquids/materials in boiler, mechanical, or electrical equipment rooms.

Storage of HM in office spaces is prohibited except for what is required for maintenance and operation of the building and equipment. Such storage, regardless of quantity, shall be kept in closed metal containers stored in a storage cabinet, in safety cans, or in an inside storage room not having a door that opens into that portion of the building used by the public.

The color of the locker indicates the hazard class that the locker is intended to store. **If you have an older version of a locker, you are not required to repaint it.**

HM Type	Locker Color
Flammables	Yellow
Corrosives	Blue
Oxidizers	Red

Keep lockers clean and orderly, and maintain all structural integrity and hardware, including doors, hinges, and shelves. Do not remove the door or ventilation bungs, penetrate the wall, modify ventilation, or otherwise modify the locker. Keep locker doors closed when materials are not being transferred.

To set up a locker, complete the following steps:

- Step 1. Identify a suitable location for the locker using the following guidelines:
- a. Locate the locker indoors in a well-ventilated area near the location that HM will be used, or outdoors under cover.
 - b. Maintain easy access to the locker.
 - c. Do not block doors.
 - d. Do not place the locker near doors, break rooms, bathrooms, offices, or other occupied non-shop areas.
 - e. Do not place the locker near floor drains, drainage channels, or areas with high foot or vehicle traffic.
- Step 2. For organization, you may assign a number to the cabinet/locker and mark it on the front top right corner. The identifier may consist of a simple two-digit sequential number (e.g., 01, 02, etc.) (See Figure 2-18). If you have more than one storage locker for the same class of HM, an alternative method is to use an identifier consisting of one of the three abbreviations listed below used to differentiate locker contents and a two-digit sequential number (e.g., FL 01, FL 02, etc). See Figure 2-14:
- FL – Flammable lockers
 - CL – Corrosive lockers
 - OL – Oxidizer lockers

Whichever method you choose, the number is needed for inventory purposes.

Note If locker numbers are used, each should have a unique number designator. Do not use the same number identifiers more than once in a facility, whether it is for lockers, storage rooms, racks, or tanks. If sharing an area with another activity, coordinate numbers to avoid using the same identifiers.

- Step 3. Post any warning signs required by the SAO-S on or near the locker. Do not place unauthorized signs, labels, stickers, or markings on the locker.
- Step 4. Ensure that an appropriately rated fire extinguisher (contact SAO-S) and spill response equipment are located nearby.



Figure 2-14. Flammable Storage Locker

Storage Rooms and Buildings

Keep rooms and buildings clean and orderly, and maintain all structural integrity and hardware including doors, hinges, and shelves. Do not remove doors, puncture holes in walls, modify ventilation, or otherwise modify the room or building if it has already been approved by the SAO-S. To set up a storage room or building, complete the following steps:

- Step 1. Have the SAO-S or designated representative approve the location you choose.
- Step 2. Provide containment as required by AR 200-1 and National Guard Bureau (NGB) policy.

Note The room floor space itself usually provides enough secondary containment; however, you need to ensure the spill cannot escape the room. You could equip, for example, each door with a sealed threshold. You can also store HM in pans or tubs on the shelf, making sure the HM is compatible with the container (for example, store acids in plastic tubs). Additionally, it may be necessary to plug or otherwise seal floor drains.

- Step 3. Ensure that an appropriately rated fire extinguisher (contact the SAO-S for approval) and spill response equipment are located nearby.
- Step 4. For organization, you may assign a number to the room in the same manner as discussed in the Storage Locker section (page 2-32). You may assign a two or four-character identifier to the room or building and mark it on all doors to the room. The number is needed for inventory and inspection forms. Ensure the HM storage area is clean and organized, and that all materials are compatible.
- Step 5. Post any warning signs required by the SAO-S. Do not place unauthorized signs, labels, stickers, or markings on the room or building. See Figure 2-15.

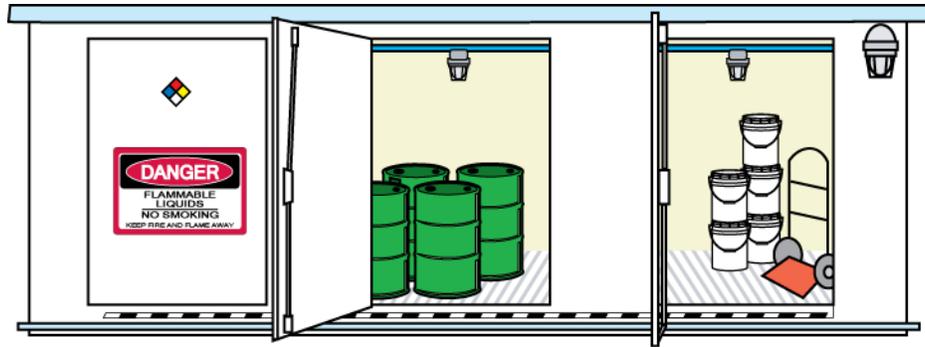


Figure 2-15. Storage Building

Storage Racks

To set up a storage rack, complete the following steps:

- Step 1. Have the SAO-S approve the location before use.
- Step 2. Provide containment as required by AR 200-1, 3-3 (a) (4) (a, b).
- Step 3. Ensure that an appropriately rated fire extinguisher (contact SAO-S) and spill response equipment are located nearby.
- Step 4. Assign a numeric identifier to the rack and mark it on the rack or on a sign posted on the rack. The number is needed for inventory and inspection forms.
- Step 5. Post any warning signs required by the SAO-S. Do not place unauthorized signs, labels, stickers, or markings on the rack.

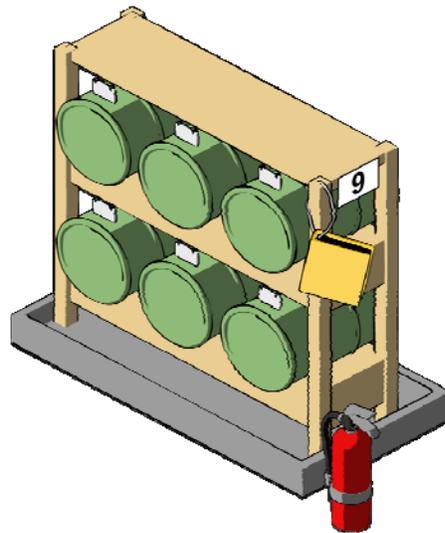


Figure 2-16. Storage Rack

Storage for Compressed Gases

When storing compressed gases, **excluding** fire extinguishers and aerosol cans, additional guidelines must be followed. A compressed gas is a gas that is packaged under charged pressure. Because compressed gases are under pressure, handle such gases with extreme care, particularly the flammable and explosive gases.

Note All oxygen cylinders are considered compressed gases.

CAUTION **DO NOT** use cylinders as rollers or supports, or for any other unintended purpose.

DO NOT accept, issue, or use a cylinder unless the contents are identified.

DO NOT store propane or ether starter cylinders with other HMs in flammable lockers.

The SAO-S is responsible for designing and approving compressed gas storage areas. To maintain compressed gas storage areas in a manner that protects human health and the environment, reference the following guidelines. Figure 2-17 shows an example of proper compressed gas storage.

- a. Ensure only non- or limited-combustible materials are used for shelves, racks, and floors.
- b. Ensure the area is well-ventilated (complete change of air at least six times each hour).
- c. Separate storage facilities from other buildings by at least 50 feet.
- d. Store gases that support combustion (i.e., oxidizers) in different sheds separated by 50 feet.
- e. Keep dry vegetation and combustible materials at least 15 feet away from storage areas.
- f. Keep cylinders out of the sun and off the ground (earth).
- g. Protect storage areas from vehicular traffic.
- h. Lock storage areas to prevent unauthorized entry.
- i. Post NO SMOKING signs.
- j. Do not allow open flames within 50 feet.
- k. Place hazard identification signs such as FLAMMABLE at all entrances.
- l. Ensure all cylinders are properly labeled with a hazard class label (do not alter or remove the manufacturer's label from cylinders).
- m. Store cylinders with the valve protection cap secured.
- n. Store cylinders you are using or storing so they do not fall over.
- o. Store liquefied flammable gas cylinders upright or so the pressure-relief valve directly communicates with the vapor space of the cylinder.
- p. Ensure cylinders are not located where they could become part of an electrical circuit.
- q. Segregate incompatible or combustible materials by at least 20 feet (see "Determining Hazardous Material Compatibility" in this chapter for more information).

- r. Isolate incompatible or combustible materials with a barrier of non-combustible material at least five feet high and with a minimum fire resistance rating of 30 minutes.



Figure 2-17. Compressed Gas Storage

Moving Cylinders

If you must move cylinders, note the following precautions:

- a. Close cylinder valves before moving cylinders.
- b. Do not lift cylinders by the valve protection cap.
- c. Do not lift cylinders by cranes or mechanical lifts unless fastened in proper containers, racks, and cradles.
- d. Do not use rope and chain slings or electromagnets to lift cylinders.
- e. Only handle, ship, or store cylinders if they have valve protection caps.

The following items do not require valve protection caps:

- a. Small cylinders with a capacity of less than 40 pounds.
- b. “Ram-bottom” type cylinders.
- c. Cylinders with less than 625 cubic inches of volumetric capacity, such as medical gases.

2.8 Stocking a Hazardous Material Storage Location

As discussed in the beginning of this chapter, the procedures outlined below such as the HM numbering system, while not specifically required by regulation, are strongly recommended as one way that allows the user to prevent and/or reduce waste generation (i.e., pollution prevention), and ensure the safety of facility personnel working with HM. The following procedures represent one system ORARNG personnel can follow to stock the storage location:

- Step 1. Check the hazardous compatibility of HM items while placing them in the storage location.

- Step 2. Ensure adequate shelf space is available to accommodate the HM containers.
- Step 3. Organize the HM in the storage location. For storage, if you have more than one storage locker, on each container of HM, write the two-digit (as shown in Figure 2-18) or four-character (as shown in Figure 2-14) storage unit identifier followed by the two-digit numeric for each type of HM being placed in the storage unit. That will include a letter designation for each shelf and a number for the position on that shelf. For example, the seventh HM item in Flammable Locker 03 (Denatured Alcohol) on the top shelf will be FL03-07. Assign each container of Product X as 01, Product Y as 02, Product Z as 03, etc. Also, assign separate numbers for different sizes of containers.
- Step 4. Place like HM containers together in the locker. Moving left to right on each shelf of each storage locker, place all the containers having the same number on the shelf in sequential order. Label the shelf position with the last two digits of the HM Shelf Location Number (SLN).
- Step 5. In a separate binder, place all the MSDSs for HMs in the locker in sequential order by SLN. Locate this binder with the associated locker for quick reference of MSDSs.

Note Don't bring HMs from home or take government purchased HMs home for private use.



Figure 2-18. Locker Set and Numbering

Inspecting Hazardous Material Storage Locations

Weekly inspections of all indoor and outdoor areas where HMs and regulated wastes are used or stored must be conducted and documented to ensure stock is rotated, containers are properly labeled, spill control materials are available, and spills have been cleaned up and reported correctly. Requirements include inspecting bulk fuel tanks (mobile and stationary), oil/water separators (OWSs), flammable materials storage cabinets, petroleum, oil, and lubricant (POL) sheds, HM storage sheds, supply rooms, etc. Inspections should be conducted IAW the ORARNG Facility Weekly Inspection Sheet, AGO Form 200-1-8, at the same time hazardous waste accumulation areas (HWAAAs) and satellite accumulation areas (SAAs) are inspected.

2.9 Maintaining and Tracking Inventory

Once storage units are stocked, perform an initial inventory of all HM in the storage location. Perform annual inventories thereafter based on the calendar year and update inventories when new products are added or removed.

In addition to the inventory, check that every container, bottle, can, box, etc. is labeled with the following:

- Product name
- Any warning of physical or health hazards listed on the MSDS
- HM identifier (if stored in a locker), if applicable

Replace any labels that are missing or unreadable.

An example Hazardous Materials Inventory, AGO Form 200-1-3, is provided in the Environmental Compliance Notebook (ECN) and can be obtained in electronic format from the HWM. Use of this form is not mandatory if the facility is using an alternate form that contains similar information.

Procuring Hazardous Materials

WARNING! ORARNG policy does not allow you to use or store non-ORARNG procured HMs.

To ensure all applicable laws are followed, the FMS, Field Maintenance Sub Shop (FMSS), UTEs, AASF, OSMS and State Maintenance are the only facilities authorized to purchase Class II, III, and IV POL products, to include supported units 15 day supply of POL. Supply Sergeants will coordinate with the appropriate supporting maintenance shop to receive their material. Materials will be stored at their supporting maintenance shop, except for small quantities that are being used at the facility in support of day-to-day operations. Any exceptions to this will be coordinated through the supporting shop and AGI-ENV.

Replenishing Hazardous Material Stock

- Step 1. After performing the periodic inspection, replace shortages by ordering new items through the military supply system or by using international merchant purchase authorization cards (IMPAC), if authorized. Purchase only the quantity needed for the specific mission or task.
- Step 2. If there is excess, call the U.S. Property and Fiscal Office (USPFO) or HWM for proper disposal of the excess HM. If no other activity can use the excess, turn in the HM IAW Chapter 4.
- Step 3. When restocking HM storage units, rotate the containers so that items that expire first are in the front. Remember, FIRST in, FIRST out.

Note Always call the HWM, or the USPFO, before turning in or ordering new items that are potentially hazardous.

Chapter 3. Managing Waste

This chapter provides an overview of how to manage waste and recyclable/reusable materials at ORARNG facilities. Management of waste includes understanding the various types of waste generated by ORARNG facilities, establishing areas to accumulate those wastes, and proper management techniques while the waste is accumulating.

This chapter addresses the following topics:

3.1	Types of Waste	page 47
3.2	Waste Management Made Easy – Waste Protocol Sheets	page 49
3.3	Hazardous Waste Generator Status	page 50
3.4	Setting-up Hazardous Waste Storage Areas.....	page 52
3.5	Hazardous Waste Storage Area Emergency Preparedness and Prevention.....	page 55
3.6	Accumulating Other Wastes	page 56
3.7	Selecting and Preparing a Container	page 56
3.8	Marking and Labeling Containers.....	page 58
3.9	Adding Waste to the Container.....	page 62
3.10	Waste Determination and Requesting Analysis of Waste.....	page 62

3.1 Types of Waste

ORARNG activities generate a wide variety of waste streams ranging from HW (such as paint thinner) to general refuse (such as waste paper). Generally, ORARNGs waste streams fall into one of the categories outlined in Table 3-1.

Table 3-1. Types of Waste

Type of Waste	Definition
Hazardous Waste (HW)	Defined as hazardous under RCRA, these waste streams must be managed IAW all applicable federal and state HW management regulations because they are specifically listed in the regulations as hazardous or they are corrosive, toxic, ignitable and/or reactive.
Universal Waste (UW)	These wastes include batteries, thermostats, mercury-containing devices, lamps, and pesticides that are defined as hazardous under RCRA. Although hazardous, they are subject to a reduced set of HW management regulations.
Recyclable/Reusable Wastes	As long as they are recycled or reused, these materials are either excluded from HW regulations or subject to reduced management requirements.
Non-RCRA Regulated Waste	This category includes wastes regulated by laws other than RCRA, such as the Toxic Substances Control Act (TSCA) (i.e. asbestos, polychlorinated biphenyls [PCBs]).
Non-Hazardous Waste	These wastes are certain solid wastes that, although not hazardous, pose a potential threat if not properly managed.

Type of Waste	Definition
Medical Waste	Any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals.
General Refuse	These solid waste streams are not regulated as hazardous under RCRA, nor do they pose an immediate threat. They may be thrown in the dumpster.

This regulation applies to the waste streams described above and generated by ORARNG activities, with the exception of medical waste. Some non-hazardous waste streams are included in this regulation because they are routinely generated by the ORARNG and/or may pose a potential danger if improperly handled. The waste streams and their associated management methods are briefly discussed in the following pages. The most common waste streams are presented in detail in Waste Protocol Sheets (WPS) provided in Appendix A.

Note The management, accumulation, and disposal of **medical waste** is beyond the scope of this Plan. For more information and guidance, contact the Occupational Health Office.

Hazardous Waste (HW)

A HW is a solid waste that is not specifically excluded from regulation and meets one of the following criteria:

- A listed waste. These can include waste codes U, P, K, and F and are specifically listed in 40 CFR 261, Subpart D. These lists include wastes from specific processes or industries (F and K) or lists of unused commercial chemical products (U and P). The P listed wastes, such as nitroglycerine (P081), are extremely hazardous and are referred to as acutely HWs. Unlike the U and P lists, F and K HWs are spent materials, such as methylene chloride that has been used in degreasing (F001).
- A characteristic waste. Also known as D code wastes, these are ignitable, corrosive, reactive, or toxic wastes as measured by standard test methods or can be reasonably determined through generator knowledge. The first three items in that group are represented with a D001, D002, or D003 waste code respectively. Commonly generated toxic D code wastes include lead-contaminated waste (D008) or cadmium-contaminated waste (D006).

Universal Waste (UW)

UW is a category of HW subject to special regulations that are less stringent than normal HW management regulations. Reference the applicable WPS for more information on specific UWs.

Recyclable or Reusable Materials/Waste

Certain recyclable or reusable materials/wastes are subject to special regulations as long as they are reused, recycled, or reclaimed.

Non-RCRA Regulated Waste

Non-RCRA regulated waste is waste that is not specifically regulated under RCRA; however, the waste is regulated by another regulation. For example, lead-based paint, asbestos, and PCBs are regulated under the TSCA.

Non-Hazardous Waste

Non-HWs are certain wastes that, although not hazardous, pose a potential threat if not properly managed.

General Refuse

General refuse wastes pose little or no recognizable threat to human health and the environment and may be put in the dumpster. In addition to common garbage such as waste paper and food wrappers, these waste streams also include used flameless ration heaters.

Note **DO NOT** throw liquids in a dumpster. If unsure of what can be put in the dumpster, call AGI-ENV.

3.2 Waste Management Made Easy – Waste Protocol Sheets

All ORARNG facilities generate waste, whether it is residue from the use of products or products themselves that are no longer useful. Learning the detailed requirements of proper waste management for each waste stream can be very time consuming, especially if not performed everyday. For example, the procedures for handling asbestos are much different than those for managing waste paint thinner.

In order to simplify the waste management process, specific handling procedures for wastes commonly generated by the ORARNG have been developed in the form of a Waste Protocol Sheet (WPS). The WPSs are easy-to-follow and contain step-by-step instructions on how to manage each waste stream. These WPSs can be found in Appendix A; see Figure 3-1 for an example.

Refer to Chapter 3 for additional information regarding the management of waste and Chapter 4 for additional directions on turning in HMs and waste. Chapter 4 also contains additional labeling and marking information for CEGs self-transporting to other ORARNG locations.

Note If you want to add a WPS that is not in Appendix A, you may request one by contacting the HWM at 503-584-3866 or by completing the DA Form 2028 found in Chapter 1, “Forms and Instructions” section, and submitting it to the AGI-ENV.

A01 – ABSORBENTS – HAZARDOUS SUBSTANCES

CHARACTERIZATION

Absorbents contaminated with hazardous materials such as solvents or acetone must be managed as hazardous waste.

If there is not a WPS created for the contaminant, refer to the MSDS for the product.

EPA Hazardous Waste Number: Dependent on the type of hazardous material absorbed; contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** Select an approved container. Use a removable head plastic or metal UN/NA drum (see Table 3-4) for accumulation.
- Step 2** Attach a Hazardous Waste label to the side of the container.
- Write: *Used Absorbent with (list HM)* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** Place container in a proper accumulation area.
- Step 4** Wear proper PPE listed on the MSDS.
- Step 5** Put absorbent in the container.
- Place lid back on the container securely.
- Step 6** Document the monthly amount of waste generated in pounds on the "Hazardous Waste Determination Worksheet" AGO Form 200-1-6.



TURN-IN PROCEDURES

- Step 1** Fill out Waste Turn-In Form AGO 200-1-14.
- Step 2** Make an appointment for turn-in.
- Step 3** E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** Bring paperwork and waste to next level of turn-in at scheduled appointment time and date.

Figure 3-1. Example Waste Protocol Sheet

3.3 Hazardous Waste Generator Status

Requirements for managing HW depend on the generator status of the facility. The State of Oregon DEQ recognizes the following three HW generator status categories and two UW handler status categories:

- Conditionally exempt generator (CEG)
- Small quantity generator (SQG)
- Large quantity generator (LQG)

- Small quantity handler of universal waste (SQHUW)
- Large quantity handler of universal waste (LQHUW)

As shown in Table 3-2, generator status depends on the quantity of waste generated per calendar month or the total quantity of HW on site at any given time.

Table 3-2. Generator Criteria

Generator Status	Time Limit Once Waste is Placed in the HWAA	Generation Quantity Limits (HW Generated per Calendar Month)	Accumulation Quantity Limits (HW Accumulated On-Site at Any Time)
CEG	No Time Limit	No more than 220 pounds (lbs) HW (about ½ a 55-gallon drum) or 2.2 lbs acute HW	No more than 2,200 lbs HW (about 5 drums) or 2.2 lbs acute HW
SQG	Regulatory limit 180 days	No more than 2,200 lbs HW (about 5 drums) or 2.2 lbs acute HW	No more than 13,200 lbs (about 33 drums) HW or 2.2 lbs acute HW
LQG	Regulatory limit 90 days	No limit	No limit
SQHUW	One year	No more than 11,000 lbs of UW	No more than 11,000 lbs of UW
LQHUW	One year	More than 11,000 lbs of UW	No limit

Generator status is determined by geographic location, fence line-to-fence line, not by activity or unit assignment. For instance, Camp Withycombe is the generator of HW for the entire facility, not the individual facilities such as the OSMS, FMS or State Shop. Table 3-3 shows the generator identification number of ORARNG facilities as they are registered with the Oregon DEQ.

EPA ID numbers will be obtained for ORARNG facilities when required by law. EPOCs will monitor the generator status of their facilities and request, through AGI-ENV, new ID numbers for each facility meeting criteria as a SQG or LQG of HW. Readiness centers typically do not have EPA ID numbers. Facilities not listed are those that have not been registered with the state and are CEGs, such as readiness centers not located with a maintenance facility. CEGs are not required to register with the DEQ or the EPA.

Table 3-3. ORARNG Generator Identification Number

Facility Name	Address	Phone Number	State EPA ID#
Camp Withycombe	10101 SE Clackamas Road Clackamas, OR 97015	503-557-5368 State Shop	ORD980988356
Camp Rilea	91426 Rilea McCarter Rd Warrenton, OR 97146	541-861-4153	ORD980988414

Facility Name	Address	Phone Number	State EPA ID#
Central Oregon UTES	P.O. BOX 370 2899 E. Hwy 126 Redmond, OR 97756	541-548-8356	ORD980987705
Salem FMS	1025 Airport Rd SE Salem, OR 97302	503-548-3411 / 3413	ORD980987648
Salem AASF 1	1921 Turner Rd SE Salem, OR 97302	503-584-3937	ORD980988497
Medford FMS	1701 S. Pacific Hwy Medford, OR 97501	541-776-6057	ORD980987713
Portland FMS	10000 NE 33rd Drive Portland, OR 97211	503-280-8174 / 8175	ORD980987697
La Grande FMS	64802 Airport Lane La Grande, OR 97850	541-963-5712	ORQ000013722
Tigard FMS	6700 SW Oak St Portland, OR 97223	503-584-6043	ORD980987762
Lebanon FMS	36646 SW Oak Dr Lebanon, OR 97355	541-258-2686	ORD980987630

3.4 Setting-up Hazardous Waste Storage Areas

This section describes how to establish and maintain waste storage and accumulation areas. HWs that are generated by the ORARNG can be accumulated in two types of accumulation areas.

- Hazardous waste accumulation areas (HWAAs) are designed to temporarily store larger quantities of HW before it is shipped off site for proper disposal.
- Satellite accumulation areas (SAAs) are designed to conveniently accumulate small quantities of HW at or near the workstation where the waste is generated. It is common for HW generated within the ORARNG to be initially accumulated at SAAs. Then it is moved to a HWAA.

Hazardous Waste Accumulation Areas (HWAAs)

HWAAs are designed to accumulate larger quantities of HW before it is shipped off site for proper disposal. Whereas SAAs are typically found adjacent to or nearby the waste generating process, HWAAs are typically found in a separate distinct location, such as a separate building

outside the main building. At ORARNG locations, HWAAAs are usually found in a storage building similar to the one shown in Figure 2-15 in Chapter 2. Unlike SAAs, accumulation time limits for HW accumulation begin the first day waste is placed in the container in the HWAA, not when the container is full.

Setting Up a Hazardous Waste Accumulation Area

Step 1. Select a well-ventilated site indoors.

CAUTION Locate HWAAAs that contain ignitable or reactive wastes at least 50 feet inside the property boundary.

Step 2. Provide secondary containment to contain unplanned releases to the environment, especially when accumulating liquid wastes. This includes plugging floor drains within 50 feet of the HWAA or maintaining a drain plug nearby in the event of an emergency.

Step 3. Ensure a means of internal communication is provided at the facility, such as a telephone, two-way radio, or internal communications equipment.

Step 4. Ensure fire extinguishers or a fire suppression system are placed nearby that are compatible with the types of potential fire hazards. Coordinate with the SAO-S for the proper type and location of extinguishers.

Step 5. If required by the local fire marshal, post any required NFPA signs on the HWAA or nearby.

Step 6. Ensure spill response equipment is nearby.

Step 7. Segregate incompatible wastes by a 4-foot aisle space or with berms, curbs, walls, spill pallets, or other physical devices. See Chapter 2 for incompatibility guidance.

Maintaining a Hazardous Waste Accumulation Area

Step HWAAAs at ORARNG facilities that are SQGs or LQGs must be inspected weekly and documented using the ORARNG Facility Weekly Inspection Form 200-1-8. If an alternate inspection checklist containing the same information that meets regulatory requirements is currently used, continue using that checklist.

Step Remember to look for the following:

- a. Position containers so the waste stream name is clearly visible and there is enough room between containers (usually three feet) to conduct inspections.
- b. Ensure labels are completed IAW this chapter and the WPSs in Appendix A.
- c. Incompatible wastes must be segregated.
- d. Ensure containers are grounded when adding or removing flammable liquids.
- e. Containers must be maintained closed except when adding or removing waste.

Satellite Accumulation Area (SAA)

Note SAA is only for HW.

A small quantity or large quantity generator may accumulate as much as 55 gallons of HW or one quart of acute (P listed) HW in containers **at or near** the point of generation where wastes initially accumulate. This area is commonly referred to as a SAA.

Once a container is full at a SAA, the generator must mark the date on the container (this becomes the accumulation start date [ASD]) and move it to the HWAA within 72 hours (including weekends and holidays).

Note At or near the point of generation means the SAA should be as close to the generating process as possible. If there is some reason the SAA cannot be located near the process (i.e., space or safety), coordinate with the HWM for approval to locate it elsewhere.

The purpose of a SAA is to allow generators some relief from having to take partially filled containers to the HWAA. Because regulators may closely inspect SAAs, take special care in setting them up and maintaining them.

The regulations allowing for the use of a SAA are not intended for a CEG of HW. It is recommended that SAAs are not set-up for CEGs.

Setting Up Satellite Accumulation Areas

- Step 1. Select a well-ventilated site indoors or a site outdoors that is under cover and fenced or otherwise secured to prevent unauthorized access. Ensure the selected site is at or near the process generating the waste.
- Step 2. Select an appropriate container (type and size). Do not use a 55-gallon drum if a 30-gallon drum is all that is needed. Use the appropriate WPS to determine the proper container type(s). Keep lids secure on all containers except when adding waste.
- Step 3. Provide secondary containment for all containers holding liquid waste. This includes plugging floor drains within 50 feet of the SAA or maintaining a drain plug nearby in the event of an emergency.
- Step 4. Mark and label the container IAW the applicable WPS. This includes ensuring the container is marked with the words "HAZARDOUS WASTE" or with the contents of the container. **DO NOT** mark the ASD on labels until the accumulation container is full.
- Step 5. Ensure an AGO Form 200-1-6 Hazardous Waste Determination Worksheet (HWDW) is filled out.
- Step 6. Position container so the waste stream name is clearly visible and there is enough room around the container to allow for ease of inspections.
- Step 7. As a BMP, post a sign identifying the SAA. While not required, it will clarify that the area is being managed as a SAA for inspectors. If posted, ensure the sign can be read from 50 feet away.
- Step 8. Ensure fire extinguishers that are compatible with the types of potential fire hazards are located nearby.
- Step 9. Ensure spill response equipment is nearby.

Step 10. Complete the ORARNG Facility Weekly Inspection Form 200-1-8.

CAUTION Ground metal containers containing flammable liquids during the transfer of materials.

Maintaining Satellite Accumulation Areas

Step 1. SAAs at a SQG or LQG must be included in the weekly inspection using the ORARNG Facility Weekly Inspection Form 200-1-8. If an alternate inspection checklist that contains the same information is being used, continue using that checklist.

Step 2. Once the container at the SAA is full, mark the date on the container(s) (this becomes the ASD) and move it to the HWAA within 72 hours (including weekends and holidays).

WARNING! Segregate incompatible wastes with berms, curbs, walls, spill pallets, separation by 4-foot distance, or other physical devices. See Chapter 2 for incompatibility guidance.

DO NOT fill drums to the top. Allow headspace (Approximately 4" in a 55-gallon drum) so that liquid in the container can expand if necessary.

DO NOT use a SAA to accumulate waste from multiple operating areas, even areas within the same shop. Also, do not mix multiple types of wastes in the same container.

3.5 Hazardous Waste Storage Area Emergency Preparedness and Prevention

Federal regulations require ORARNG facilities that are SQGs or LQGs be maintained and operated to reduce the possibility of fire, explosion, or any unplanned release of HW, which could threaten health or the environment. To achieve these standards, each facility must maintain required equipment, test and maintain that equipment, provide access to communications or an alarm system, maintain aisle space, and attempt to establish arrangements with local authorities to respond to emergency situations.

Each ORARNG facility is provided with telephones to summon emergency assistance from local authorities. The ORARNG can use the buddy system in order to comply with the requirement in 40 CFR 265.34, whenever HW is being poured, mixed, or otherwise handled. This ensures that one person will stay in visual contact with someone who is conducting any of the above actions and will be able to summon emergency assistance and warn or alarm other employees at the facility. Federal regulations also require SQGs and LQGs to post the following information next to the facility telephone(s):

- The name and telephone number of the emergency coordinator.
- The location of fire extinguishers and spill control material, and if present the location of fire alarms.
- The telephone number of the fire department, unless the facility has a direct alarm to the fire department.

3.6 Accumulating Other Wastes

ORARNG activities may (but are not required to) utilize the standards for HWAAAs to accumulate the following types of other wastes:

- UWs (e.g., light bulbs and batteries)
- Recyclable/reusable materials (e.g., lead-acid batteries and off-specification fuel)
- Non-RCRA regulated and non-hazardous wastes

At a minimum, accumulation or storage areas for these wastes should be at a location that provides compatible storage, is protected from the elements, and is provided with a means of secondary containment to prevent potential release to the environment. The ORARNG Facility Weekly Inspection Form 200-1-8 should be used for inspection of these areas as well.

CAUTION **When storing liquid non-hazardous wastes, such as used antifreeze and used POLs in shop areas, provide secondary containment or another means to prevent release to floor drains and the environment.**

There is a one-year accumulation time limit for UW and PCB; however, there are no accumulation time limits for recyclable/reusable materials or non-hazardous wastes. For CEGs there is no time limit for UW; however, as a BMP, all waste should be turned in at least annually.

To set up an accumulation area for these items, follow the steps below:

- Step 1. Select a well-ventilated site indoors or a site outdoors that is under cover and fenced, or otherwise secured to prevent unauthorized access.
- Step 2. Ensure the area provides a means to prevent release to floor drains or to the environment (e.g., secondary containment, berms, or spill pallets).
- Step 3. Ensure fire extinguishers and/or a fire suppression system are in place nearby that is compatible with the types of potential fire hazards.
- Step 4. Locate spill response equipment nearby in sufficient quantity and type to contain a spill.

3.7 Selecting and Preparing a Container

Only certain types of containers are authorized for accumulating waste. The type of container selected depends on the type of waste.

- Removable head drums are commonly used for non-liquid wastes such as rags and filters.
- Non-removable head drums (drums with bung holes) are used for liquids.
- Boxes are sometimes the best containers for certain items like batteries, aerosol cans, and fluorescent light tubes.

Note A container is defined as any portable device, in which material is stored, transported, treated, disposed of, or otherwise handled. Non-bulk containers are typically 110 gallons or less.

Step 1. The WPSs located in Appendix A list the container requirements for each waste stream (if there is not a WPS for your waste, contact the HWM). Drums must be clean and in good condition and able to withstand handling, transport, and long-term storage without leaking. Containers must not be creased, rusted, or dented and also must have appropriate sealing lids. Remove any previous markings and labels from the container or mask over with paint. Approved containers are listed in Table 3-4.

Table 3-4. Approved Containers for ORARNG Units

Container Type	National Stock Number (NSN)¹
55-gallon Closed-head Steel Drum	8110-00-292-9783
30-gallon Closed-head Steel Drum	8110-01-447-2937
85-gallon Disposal Drum, Unlined	8110-01-101-4055
85-gallon Recovery Drum	8110-01-101-4056
55-gallon Removable-head Steel Drum	8110-00-030-7780
55-gallon Polyethylene Non-Removable-head Drum	8110-01-150-0677
55-gallon Polyethylene Removable-head Drum	8110-01-150-0677
30-gallon Removable-head Steel Drum	8110-00-366-6809
20-gallon Removable-head Steel Drum	8110-00-146-1588
Box, Fiber (cardboard); 18" x 12" x 10"	8115-00-179-0575
Box, Fiber (cardboard); 16" x 10" x 8"	8110-00-179-0578
Fluorescent Bulbs Box, Fiber	Use original container/fabricate a box/local purchase
5-gallon Plastic Bucket	Sometimes provided by DRMO - Call HWM

¹NSNs are provided for ordering purposes only. The supplier may substitute comparable containers with different stock numbers only if the substitute meets DoD supply standards.

3.8 Marking and Labeling Containers

All containers used to accumulate HW, UW, and non-RCRA HW should be marked IAW this section. If you are using a previously used container, ensure the previous contents are compatible with the waste to be placed in the container and remove any previous markings and labels from the container or mask over with paint.

The WPS provides specific marking requirements for common ORARNG waste streams. The WPS shows labels required for the waste container.

Hazardous Waste

- Step 1. For each container of HW, use a HW label (see Figure 3-2 (preferred) or Figure 3-3). Figure 3-2 shows a HW label typically used for accumulating waste. Figure 3-3 shows a HW label used for transporting HW. ORARNG personnel may use either label for the accumulation of HW.
- Step 2. Use an indelible marker to write the required information on the label (see the applicable WPS in Appendix A for the information required on the label). Complete the label according to the directions contained on the WPS. For a SAA, DO NOT mark the container with an ASD until the container is full and is moved to the HWAA.
- Step 3. Attach the label securely to the side of the container.
- Step 4. If a label is not available, mark the container with the information required on the label in Figure 3-2 including the words “Hazardous Waste.”



Figure 3-2. Hazardous Waste Label – Accumulation



Figure 3-3. Hazardous Waste Label – Transportation

Hazardous Waste from Off-Site CEGs

Note This section is only for maintenance shops that receive waste from off-site CEGs.

CEGs of HW are authorized by the Oregon DEQ to ship waste to their supporting maintenance shop. Chapter 4 contains detailed instructions for turn-in and transporting the waste to the supporting facility. Once received at the supporting maintenance shop, manage the waste IAW the following steps.

- Step 1. For each container of HW, use a CEG HW label (see Figure 3-4).
- Step 2. Use an indelible marker to write the date the waste was received from offsite.
- Step 3. Attach the label securely to the side of the container. Do not cover the hazardous waste label applied to the container by the generator.
- Step 4. If a label is not available, mark the container with the information required on the label in Figure 3-4 including the words “CEG Hazardous Waste” and date received at maintenance shop.
- Step 5. Immediately record the waste shipment on the Waste Log Off-Site CEG, AGO Form 200-1-15.

Note Units collocated with a maintenance shop (fence line) are exempt from this requirement.



Figure 3-4. CEG Hazardous Waste Label – Off-Site CEG Waste

Universal Waste

- Step 1. For each container of UW, use a UW label. Figures 3-5 (preferred) and 3-6 contain examples of UW labels.
- Step 2. Use an indelible black marker to write the required information on the label. See the applicable WPS in Appendix A for the information required on the label.
- Step 3. Attach the label securely to the side of the container.
- Step 4. If a label is not available, mark the container with the information required on the label in Figure 3-5 including the words “Universal Waste” and the ASD.

UNIVERSAL WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
THE FOLLOWING MATERIALS ARE REGULATED AS A
UNIVERSAL WASTE IN ACCORDANCE WITH 40 CFR PART 273.

UNIVERSAL WASTE - BATTERY
 UNIVERSAL WASTE - MERCURY THERMOSTAT(S)
 UNIVERSAL WASTE - PESTICIDE(S)
 UNIVERSAL WASTE - FLUORESCENT LAMPS
(as authorized)

ACCUMULATION START DATE: _____

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX
(REQUIRED DURING TRANSPORT WHEN MATERIAL IS ALSO
REGULATED BY 49 CFR PARTS 173-180)

HANDLE WITH CARE!

Style U99877R 04/97 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60648 (800) 621-6808

Figure 3-5. Universal Waste Label

**UNIVERSAL
WASTE**

CONTENTS _____

ACCUMULATION START DATE _____

SHIPPER _____

ADDRESS _____

CITY, STATE, ZIP _____

Lab Safety Supply Inc. Reorder No. 42108

Figure 3-6. Universal Waste Label

Non-Hazardous and Non-RCRA Regulated Waste

- Step 1. For each container, use a non-hazardous waste or non-RCRA regulated waste label, fill it out, and place it on the side of the container. If unsure whether a waste falls into one of these categories, contact the HWM. Use the label shown in Figure 3-7 for non-hazardous waste such as latex paint and Figure 3-8 for non-RCRA regulated waste such as asbestos waste.
- Step 2. Use an indelible black marker to write the required information on the label.
- Step 3. Attach the label securely to the side of the container.
- Step 4. If a label is not available, mark the container with a general description of the waste.



A green rectangular label with white text. The top half features the words "NON-HAZARDOUS" in large, bold, white letters, with "Waste" in a smaller font below it. Below this is a white box with the heading "OPTIONAL INFORMATION" in green. Inside this box are four lines of text with horizontal lines for input: "SHIPPER", "ADDRESS", "CITY, STATE, ZIP", and "CONTENTS". At the bottom of the label, the words "NON-HAZARDOUS WASTE" are printed in bold green letters.

Figure 3-7. Non-Hazardous Waste Label



A blue rectangular label with white text. The top half features the words "NON-RCRA" and "REGULATED" in large, bold, white letters, with "WASTE" in a smaller font below it. Below this is a white box with the heading "GENERATOR INFORMATION:" in blue. Inside this box are five lines of text with horizontal lines for input: "SHIPPER", "ADDRESS", "CITY, STATE, ZIP", "PROPER D.O.T. SHIPPING NAME", and "UN OR NA NO:". Below the input lines is a line for "PHONE:". To the left of the input box, there is a small block of text: "THIS WASTE NOT REGULATED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY 40CFR(191) BUT MAY BE SUBJECT TO DEPT. OF TRANSPORTATION REGULATIONS, (49CFR) OR STATE OR LOCAL REGULATIONS." At the bottom of the label, the words "NON-RCRA REGULATED WASTE" are printed in bold blue letters. At the very bottom, in small text, it says "BWMV REV.11-1-02 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-8808".

Figure 3-8. Non-RCRA Regulated Waste Label

3.9 Adding Waste to the Container

These procedures are general instructions that apply to any waste. Some wastes may require special handling. Before adding waste to a container, check the WPS or MSDS if available.

Note A container is defined as any portable device, in which material is stored, transported, treated, disposed of, or otherwise handled. Non-bulk containers are typically 110 gallons or less.

- Step 1. Ensure the container is appropriate for the waste you are accumulating and that it is marked and labeled properly.
- Step 2. Don the proper PPE during waste handling. Refer to the applicable MSDS for guidance on the proper PPE.
- Step 3. Open the container and add the waste. Use a funnel to pour liquids into drums.

WARNING! **DO NOT mix different waste stream types in the same container. Whenever adding flammable waste to a drum, ensure the drum is properly grounded. Check the cable to ensure that it is attached to the ground rod before attaching the clips on the other end of the cable to the funnel and safety can.**

- Step 4. When adding waste to an empty container in a HWAA for the first time, use an indelible black pen to write the ASD on the label. For a SAA, DO NOT mark the container with an ASD until the container is full or is moved to the HWAA. UW must have an ASD on the container and words that identify the waste.
- Step 5. Secure the lid or bungs on the container.
- Step 6. Record the amount and type of waste being added to the container to the HWDW AGO Form 200-1-6. See Figure 4-2 in Chapter 4 for an example.

WARNING! **Do not over fill the container. When the level of the waste is near the top of the container, STOP adding waste. As a guide, maintain headspace in the container as noted below.**

<u>Size of Container</u>	<u>Amount of Headspace</u>
55-gallon	4 inches
30-gallon	3 inches
15-gallon	2 inches
less than 15-gallon	1 inch

Note Do not place liquids in removable head drums.

3.10 Waste Determination and Requesting Analysis of Waste

Waste determination is the process of determining if a waste is a HW. Waste determination can be accomplished through laboratory analysis or by applying knowledge of the hazardous characteristics of the materials or process that generated the waste. The ORARNG uses AGO Form 200-1-6 to document all waste determinations. The common wastes generated by

ORARNG facilities are identified on the AGO Form 200-1-6, which match up with the WPSs that are located in Appendix A. All waste determination records must be maintained for at least three years from the date the waste was last sent off site.

Waste determination, using knowledge of materials or process, can be accomplished through the use of MSDSs. However, in some cases, MSDSs do not include chemicals that make up less than 1% of the total constituents of the material. Therefore, in some cases, using knowledge of materials and process to characterize a waste as non-hazardous may be inadequate.

If the waste is not characterized through knowledge of its process (i.e., use of MSDSs), it must be sampled and analyzed. Examples of analyzed waste streams are OWS sludge, parts washer fluid and filters, paint barrier paper and debris, and contaminated soils.

Funding of HW analyses is supported from environmental funds. To request a sample of the waste, contact the HWM or EPM. The HWM will draw the sample, arrange for the waste to be sampled, or provide instructions on how to sample the waste. Sampling results are typically returned within two to four weeks. The laboratory will send results directly to the HWM who will interpret them and provide guidance on disposing of your waste properly. The HWM will also provide a copy of the laboratory results to the facility.

While waiting for the analytical results, mark or label the container(s) with a HW label as shown in Figure 3-2, the ASD, and the words “Awaiting Analysis.”

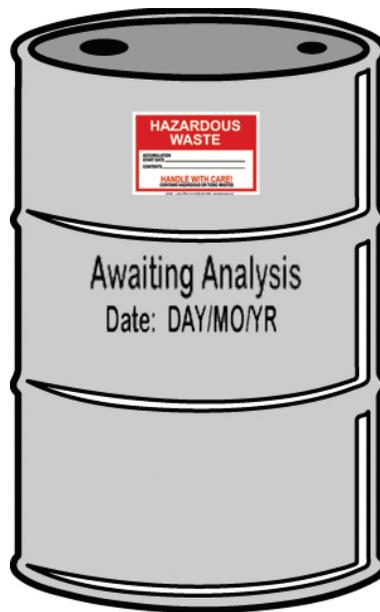


Figure 3-9. Example Awaiting Analysis

Note The ASD begins the moment waste is put in the container, not after receiving the laboratory results. Containers marked, as “Awaiting Analysis”, must be placed in a HWAA and not at a SAA.

This page intentionally left blank.

Chapter 4. Turning In and Transporting Hazardous Materials and Hazardous Waste

This chapter provides an overview of how to turn in HM and waste at ORARNG facilities. This includes preparing paperwork for turn-in and transportation of HM and waste.

This chapter addresses the following topics:

4.1	Overview of Turn-in Process	page 65
4.2	Turn-in Procedures for Hazardous Materials	page 65
4.3	Generator Specific Turn-in Procedures for Hazardous Waste for ORARNG Facilities	page 66
4.4	Preparation of the Waste Turn-in Form, AGO Form 200-1-14.....	page 68
4.5	Additional Waste Turn-in Procedures.....	page 70
4.6	The Waste Off-Site CEG Log, Form 200-1-15.....	page 73
4.7	Transporting Hazardous Materials and Hazardous Waste Overview.....	page 75
4.8	Preparing Shipping Papers	page 76
4.9	Loading/Segregation of Containers.....	page 76
4.10	Forms and Instructions.....	page 76

4.1 Overview of Turn-in Process

ORARNG activities must, as soon as possible, turn in unwanted, unserviceable, or overstocked HM for reuse or reclassification as waste. Regulated wastes should be recycled or turned in on a routine basis. The maximum time limit for accumulating HW at a facility is dependent upon the facility's generator status.

Generators must allow enough lead-time to ensure the waste is turned in before the allotted time limits are exceeded. Allow time to process the paperwork and schedule pick-up or delivery. Remember, as discussed in Chapter 3, the time starts when the date is placed on the container. In a SAA, this is the day the drum is filled, and in an HWAA, this is the day the first waste goes into the container.

Communication and coordination are the keys to a successful waste management program. Whenever preparing to turn-in HM and waste, you must coordinate in advance with your turn-in location to ensure it is prepared to receive the waste.

4.2 Turn-in Procedures for Hazardous Materials

Serviceable HMs are turned in to USPFO-Supply Distribution Center (SDC). A serviceable material is one that has not been declared a waste and may still be used. All materials must be serviceable, in their original packages, unopened, with no dents, rust or damage to the original package. Following are turn-in procedures for HMs.

Coordinate with the USPFO HM Identifier and Examiner to determine if they will reuse the HMs, or if they will reclassify them as waste. If they plan to reclassify any of the HMs as waste, then turn those HMs in as waste.

- Step 1. Pack all HMs in their original shipping containers or UN/NA box or drum if applicable.
- Step 2. Mark the containers with their contents.
- Step 3. Close and seal the container(s).
Boxes: Seal each box with strapping tape or packing tape. Do not use duct tape or masking tape.
Drums: Seal removable head drums with the ringbolts down so they can be double-stacked, if necessary. For non-removable top drums, ensure bungs are tightly closed.
- Step 4. For each HM, complete turn in documents required by the USPFO and attach a copy of the HMs MSDS.
- Step 5. Complete a DD Form 836 if the applicable material is a DOT HM.

4.3 Generator Specific Turn-in Procedures for Hazardous Waste for ORARNG Facilities

Options for turning in waste vary depending on the facility where the waste is generated. This section details waste turn-in procedures for four different types of waste generating facilities. These include:

Wastes generated by State Maintenance Workers (SMWs) and units at locations collocated at a larger maintenance facility or training area such as a readiness center collocated with its maintenance shop. This includes both AASFs and their co-located units and SMWs.

Wastes generated at units or readiness centers that are not collocated with a maintenance activity. These facilities, if classified as a CEG, are authorized to self-transport HW to their supporting maintenance shop.

Wastes generated at maintenance shops or readiness centers that are serviced by the Defense Reutilization and Marketing Office (DRMO) contractor.

Wastes generated at any CEG facility and turned-in directly to the 10-day transfer facility at USPFO-SDC. **This is the least common type of turn-in and requires the greatest level of coordination.** The waste must be manifested directly to the destination facility and NOT the USPFO-SDC, and efforts must be undertaken to ensure the waste does not remain at the USPFO-SDC 10-day transfer location for more than 10 days.

State Maintenance Worker (SMW) Waste Turn-in:

- Step 1. Contact the unit/facility EPOC or senior unit supply sergeant to coordinate turn in time and location.
- Step 2. Complete Waste Turn-in form AGO 200-1-14 (see Figure 4-1).
- Step 3. Submit the turn-in form and deliver the waste to the unit/facility EPOC or the senior unit supply sergeant.

- Step 4. Obtain a signature for your copy of the turn-in form AGO 200-1-14 and file it in Annex K of your ECN.
- Step 5. Ensure the waste is logged on the HWDW AGO Form 200-1-6.

Unit / Readiness Center Waste Turn-in:

- Step 1. Complete Waste Turn-in form AGO 200-1-14 (see Figure 4-1).
- Step 2. Contact your supporting maintenance shop EPOC to coordinate turn in time and location.
- Step 3. Fax or e-mail a copy of the completed turn-in form to the shop EPOC.
- Step 4. Ensure the waste is logged on the HWDW AGO Form 200-1-6 for your facility. Ensure all activity's HWDWs are consolidated for the entire site.
- Step 5. If self transporting to your supporting maintenance shop, use the WPS for each waste you are turning in to determine if you must meet DOT requirements for shipping, including DOT labeling, HW markings (labeling) and proper shipping documents such as the DD Form 836. Directions on completing the DD Form 836 are included later in this chapter. Only CEG units or activities may self transport HW to their supporting shop.
- Step 6. Deliver the waste to your supporting shop at the arranged time and place ensuring direct hand off of the waste to the EPOC or designated representative.
- Step 7. Obtain a signature for your copy of the turn-in form AGO 200-1-14 and file it in Annex K of your ECN.

Maintenance Shop Waste Turn-in:

- Step 1. Complete local turn-in form AGO 200-1-14 (see Figure 4-1) (consolidate off-site CEG waste with shops).
- Step 2. Contact the HW manager or USPFO HM Identifier and Examiner to coordinate turn in time and location.
- Step 3. Fax or e-mail a copy of the completed turn-in form to the HWM and USPFO HM Identifier and Examiner.
- Step 4. If a DRMO contracted transporter picks up the waste from your facility:
 - Step 4.1. Ensure all of the waste listed on the manifest is taken by the transporter.
 - Step 4.2. Do not allow the transporter to take any waste that is not listed on the manifest.
 - Step 4.3. Do not allow the transporter to take any waste with an incorrect manifest.

If you have any questions, contact the HWM immediately.

- Step 5. If the manifest is correct, sign the manifest in the block designated for the generator.
- Step 6. The transporter will sign the manifest in the block designated for the transporter.
- Step 7. Keep the generator copy and file it in Annex K of your ECN.

Step 8. Within 30 days you should receive the signed original copy of the manifest.

Step 8.1. When this original manifest is received, file it in Annex K of your ECN.

Step 8.2. If the original signed manifest is not received within 35 days, contact AGI-ENV at (503) 584-3866 to prepare an exception report which must be filed with the Oregon DEQ.

Note Ensure your waste is logged on the HWDW AGO Form 200-1-6 for your facility. Off-site generator's waste is logged onto AGO Form 200-1-15; do **not** include off-site generator waste on shop's HWDW.

Waste Turn-in Directly to the USPFO-SDC:

Step 1. Complete local turn-in form AGO 200-1-14 (see Figure 4-1) (consolidate off-site waste with shops).

Step 2. Contact the contact the HWM or USPFO HM Identifier and Examiner to coordinate turn in time and location.

Step 3. Fax or e-mail a copy of the completed turn-in form to the HWM and USPFO HM Identifier and Examiner.

Step 4. Manifest and labels will be shipped to generator prior to transportation. Place labels on appropriate containers.

Step 5. Coordinate with USPFO HM Identifier and Examiner the exact day and time to transport HW manifest.

Step 6. Sign and date manifest in generator block and transporter one block the day the manifest is transported to USPFO-SDC.

Step 7. Take "Generator Copy" out of manifest and file in Annex K of ECN.

Step 8. Transport the waste and manifest to USPFO-SDC.

Note Transporter 1 copy remains with manifest and should be returned to the generator after Transporter 2 has signed manifest.

4.4 Preparation of the Waste Turn-in Form, AGO Form 200-1-14

ORARNG activities use the Waste Turn-in Form to process waste for turn in. Up to 25 different waste streams can be processed on one form. This form is available on the ORARNG Environmental website and at the end of this chapter. Fill out the 200-1-14 IAW the ECN for items of waste being turned in.

Submit the completed Waste Turn-in Form and the associated MSDSs, if applicable for the waste(s), to the person responsible for receiving waste from your facility as directed in Section 4.2 above, depending on your location.

WASTE TURN-IN

Unit/Activity:		Facility:			POC:			Phone:								
1	2	3	4			5	6	7	8	9	10	11				
Item#	Waste /Process Description / Protocol Number	Manufacturer	NSN	Physical State			Wt lbs	# cont	Container Type	Container Size	UN Container needed?	HW?	EPA/State Waste Codes	AGI-ENV use only		
				S	L	G								WPS #	CLIN	Notes
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
Waste Received By:		Print Name:														
		Signature:														
		Unit/Facility:														
		Date:														

Figure 4-1. Example Waste Turn-in Inventory Form (AGO Form 200-1-14)

Indoor Range Residue and Debris Considerations

Dispose of indoor range lead contaminated firing range debris as HW IAW this chapter, the WPS, and the ECN. Lead residue and the filters in the high efficient particle air (HEPA) vacuum systems are HW due to the presence of lead.

- Step 1. Each generating activity will provide a listing of individuals qualified to inspect and certify ammunition, explosives and dangerous articles (AEDA) as being inert. See the sample letter format at the end of this chapter. It is the responsibility of the turn-in activity to keep the list current, with updates being provided as personnel changes dictate. Each generating activity shall ensure that its servicing DRMO has a current list of the personnel and their sample signatures who are qualified and authorized to inspect, certify and verify AEDA residue, range residue and explosive contaminated property (ECP).
- Step 2. To prevent dangerous material from being turned in, all inert ammunition items including dummy rounds, containers and items such as ammunition pouches and bandoleers, and inert material generated from demilitarized AEDA will be inspected by a technically trained and qualified individual who will submit a certificate as part of the turn-in document, as follows:

“This certifies and verifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and to the best of our knowledge and belief, are inert and/or free of explosives or related materials.”
- Step 3. Certifications of lead debris turn-in require dual signatures. The first signature (certifier) may be either qualified DoD personnel or qualified contractor personnel. The second signature (verifier) must be a technically qualified DoD person, and a U.S. citizen. Where government contract requires contractor verification (in addition to certification), this requirement may be waived. However, appropriate DoD quality assurance controls must be established.
- Step 4. The certification and verification signatures must be directly above the typed or clearly stamped or legibly printed full name, rank/rate, complete organization name and address and phone number (commercial and DSN) of the personnel that certified and verified the inspection. See the sample Memorandum for Record (MFR) for lead turn-in and certification at the end of this chapter.
- Step 5. Material generated from AEDA will not be mingled with other types of material including scrap.

Asbestos Containing Materials (ACMs) Considerations

Dispose of ACMs as waste IAW this chapter, the WPS, and the ECN.

- Step 1. All asbestos-containing waste materials shall be adequately wetted to ensure it remains wet until disposed of and packaged in leak-tight container such as two plastic bags each with a minimum thickness of 6 mil or in a plastic lined metal drum. Prior to turn-in all bags must be over-packed in an approved DOT container.
- Step 2. Containers are to be labeled as follows:

The name of the asbestos waste generator, the location at which the waste was generated, and a warning label that states:

DANGER

Contains Asbestos Fibers

Avoid Creating Dust

Cancer and Lung Disease Hazard

Avoid Breathing Airborne

Asbestos Fibers

- Step 3. For each waste shipment a DEQ Form ASN-4 must be prepared. See the end of this chapter for a sample form and instructions on completing the form.
- Step 4. Keep asbestos waste shipment records, including a copy signed by the owner or operator of the designated waste disposal site, for at least three years in Annex K of ECN.

Contaminated Soil

In the event of a spill of HMs or waste that contaminates soil, follow these steps for the proper turn-in and disposal of the contaminated materials. Follow the procedures in Chapter 5 of this Plan for responding to the spill.

- Step 1. Coordinate with AGI-ENV to determine if there are special management requirements while the waste is on site.
- Step 2. Contaminated soil may need to be tested prior to disposal. See Chapter 3, Section 3.10 for instructions on requesting laboratory analyses.
- Step 3. Dispose of contaminated soil using laboratory results to determine appropriate disposal, and using the WPS for Absorbent, Hazardous Substances or Non-hazardous Substances, and IAW this chapter and the ECN.

4.6 The Waste Off-Site CEG Log, Form 200-1-15.

Note	This section is <u>ONLY</u> for maintenance shops that receive waste from off-site unit/readiness center.
-------------	--

The Waste Off-Site CEG log is used to track HW that is self transported by CEG readiness center or facility personnel to their supporting maintenance shop. All waste from a CEG that is self transported to a shop should be listed on this log. The first six columns of the form should be completed by the supporting maintenance shop EPOC or other designated person at the time of delivery of waste. The last three columns should be completed once the waste is picked up by the contractor. A copy of the form is located in the ECN.

4.7 Transporting Hazardous Materials and Hazardous Waste Overview

This section serves as a guide for transporting HM, highlighting the primary steps taken when shipping HM. These procedures are designed as a reminder for the trained and certified HM Handlers and are not intended for anyone who is unfamiliar with DOT requirements for shipping HM.

DRMO Contractor Pick Up

A properly licensed, permitted commercial contractor picks up and transports HW from all ORARNG maintenance facilities. The DRMO contractor provides all the necessary paperwork (manifest and land disposal restriction [LDR]). The driver of the transporting vehicle is responsible for the following:

- a. Inspecting shipments prior to leaving to ensure use of proper containers, labels, and manifests.
- b. Placing the proper DOT shipping labels on the containers.
- c. Segregating incompatible waste and materials within the transporting vehicle.
- d. Securing wastes in the vehicle.
- e. Placarding the vehicle.

Self-transporting

In some cases, ORARNG units will transport HM and waste across public roadways. Possible transport scenarios include the following:

- Units carrying HM (including bulk fuel shipments) to and from the field during training exercises.
- Units/facilities turning in excess or overstocked HM to the USPFO.
- Units/facilities turning in waste that was originally a HM. WPS should assist identifying these items, otherwise call HWM or HM Identifier for assistance.

ORARNG locations that are CEGs are authorized to transport HW across public roadways to their supporting maintenance shops without a uniform hazardous waste manifest.

When transporting HM or CEG HW across public roadways, the ORARNG should comply with DoD Regulation 4500.9-R, the Defense Transportation Regulation (DTR). The DTR mandates compliance with all DOT, state, and local transportation rules. It lays out specific guidelines for packaging and transporting HM in military vehicles, including:

- Using shipping papers (DD Form 836) (if the material or waste is a DOT HM)
- Marking/labeling the containers
- Placarding the vehicle

4.8 Preparing Shipping Papers

The DTR requires shipping papers for all HM shipments over public roadways. Chapter 204.G.2 of the DTR, states that a DD Form 836 (located in the Forms and Instruction section of this chapter) must be used as a shipping paper with emergency response information for all government vehicles transporting HM. Follow the instructions included with DD Form 836 to complete the form. Proper shipping names for the virgin product may be obtained from the Transportation Information Section on the HMIRS MSDS.

Note Units/readiness centers collocated with an FMS delivering HM/HW to the FMS do not need shipping papers. Only facilities that ship HM/HW across public highways need shipping papers.

4.9 Loading/Segregation of Containers

Containers with HMs must be secured in the vehicle and segregated to prevent accidental mixing of incompatible materials. Refer to the segregation table in 49 CFR 177.848 for proper segregation of materials during transport.

4.10 Forms and Instructions

This section contains the following forms and instructions:

- Sample AEDA Authorized Personnel Letter
- Sample AEDA Turn-in Memorandum for Record
- ASN-4, Asbestos Waste Shipment Report Form
- Instructions for using DEQ Form ASN-4, Waste Shipment Record Form
- Instructions for Completing DD Form 836
- DD Form 836 - Dangerous Goods Shipping Paper

All AGO forms and instructions are found in the ECN.

This page intentionally left blank.

Sample AEDA Authorized Personnel Letter

**OREGON ARMY NATIONAL GUARD
HHC 1 BN 162 IN
2950 Taylor Way
Forest Grove, OR 97116**

IN-E-CDR

6 March, 2005

MEMORANDUM FOR: Defense Property Disposal Office, Ft. Lewis

SUBJECT: Personnel Authorized to sign Inert Certification Ammunition, Explosives and Dangerous Articles (AEDA)

1. Reference DoD 4160.21-M-1.
2. The following individuals are authorized to inspect and sign disposal memorandums for lead debris into the Hazardous Waste Accumulation Facility.

<u>NAME/GRADE/SSN</u>	<u>TELEPHONE</u>	<u>SIGNATURE</u>
Joseph P. Snuffy/SSG/E-6	(503) 359-4832	<i>Joseph P Snuffy</i>
Mary A. Poppinmuff/SFC/E-7	(503) 359-4833	<i>Mary A Poppinmuff</i>

3. This letter of authorization supersedes all others.

Thomas S Thumb

Thomas S. Thumb
MAJ, IN
Adjutant

CF:
AGI-ENV
SSO

Sample AEDA Turn-in Memorandum for Record

**OREGON ARMY NATIONAL GUARD
HHC 1 BN 162 IN
2950 Taylor Way
Forest Grove, OR 97116**

6 March 2005

MEMORANDUM FOR RECORD

SUBJECT: Turn-in of Lead Debris from Forest Grove Readiness Center, Oregon

1. This certifies and verifies that the AEDA Residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and to the best of our knowledge and belief, are inert and/or free of explosives or related material.
2. On this date, **four hundred thirty eight (438) pounds of lead debris** has been turned in for disposal as Hazardous Waste.
3. Point of Contact is the undersigned at commercial phone (503) 359-4362 or Fax at (503) 357-8098.
4. The turn-in document is **W66MRS** (*leave blank for USPFO*).

Joseph P Snuffy

Joseph Peter Snuffy
SSG/E-6 Range NCOIC
OR Army National Guard, HHC 1 BN 162 IN
2950 Taylor Way, Forest Grove, OR 97116
(503) 359-4832
Certifier

Mary Anna Poppinmuff

Mary Anna Poppinmuff
SFC/E-7 TNCO
OR Army National Guard, HHC 1 BN 162 IN
2950 Taylor Way, Forest Grove, OR 97116
(503) 359-4833
Verifier

ASN-4, Asbestos Waste Shipment Report Form



PLEASE PRINT OR TYPE, except for required signatures. Questions? Contact the DEQ Asbestos Control Section, 2020 SW 4th, Ste. 400, Portland, OR 97201, (503) 229-5982, OR call 1-800-452-4011 for the phone number and location of your local regional DEQ office.

WASTE GENERATOR: (Contractor - Facility – Operator)

1. Asbestos removal site name and address: _____

Street City County Zip

Contact person: _____ Phone: _____

2. Operator's name and address: _____ Phone: _____

Street City County Zip

3. Waste disposal site: _____ Phone: _____

Street City County Zip

4. Describe asbestos materials: _____

5. Containers: _____ Number: _____ Type: _____

6. Total quantity (cubic yards): _____

7. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to government regulations; all movement of asbestos-containing material shall be recorded on a Waste Shipment Record Form.

Name: _____ Company: _____

Signature: _____ Date: _____

TRANSPORTER(S):

8. Transporter #1: (Acknowledgment of receipt of materials)

Agent: _____ Company: _____

Address: _____ Phone: _____

Signature: _____ Date: _____

9. Transporter #2: (Acknowledgment of receipt of materials)

Agent: _____ Company: _____

Address: _____ Phone: _____

Signature: _____ Date: _____

DISPOSAL: (Certification of receipt of asbestos materials covered by this manifest, except as noted in item 11 below.)

10. Waste Disposal Site: _____

Name and title: _____ Date: _____

Signature: _____ Phone: _____

11. DISCREPANCY SPACE: (Add attachments as needed) _____

Instructions for using DEQ Form ASN-4 Waste Shipment Record Form

This form is to be used as a permanent record for tracing asbestos waste materials from removal site to final disposal. The Oregon Department of Environmental Quality (DEQ) regulations that apply to asbestos waste disposal are found in OAR 340-32-5650. For more information, contact the DEQ Asbestos Control Section, 2020 SW 4th, Ste. 400, Portland, OR 97201, or call 1-800-452-4011 for the location and phone number of your local DEQ Regional Office.

WASTE GENERATOR SECTION

(Numbers below correspond to numbers on the front of this Form)

1. Enter the name and address of the site where the asbestos waste was generated. Enter the name and phone number of the contact person for the contractor, facility, or operator of the asbestos waste generation site.

2. Enter the name, phone number and address of the person performing the asbestos abatement.

3. Enter the name, phone number and address of the disposal site that the waste is taken to.

4. Describe the materials being removed. (i.e. pipe insulation, flooring, roofing, popcorn ceiling material, HVAC system insulation, etc....)

5. List the total number of containers and their type. Also enter one of the following container codes used in transporting each type of asbestos material. (Specify any other type of container used if not listed below):

DM Metal drums, barrels

DP Plastic drums, barrels

BA 6 mil. plastic bags or wrapping

6. Give an estimate of the total cubic yards of material.

7. Print clearly the name of the company and their authorized signer. This section of the form must be signed and dated.

NOTE: The waste generator must retain a copy of the completed disposal form.

WASTE TRANSPORTER SECTION

8. Transporter #1: Acknowledgment of receipt of asbestos waste materials. Print agent and company name, then sign and date.

9. Transporter #2: Acknowledgment of receipt of asbestos waste materials. Print agent and company name, then sign and date.

NOTE: If there are more than two transporters attached a new waste shipment form.

DISPOSAL SITE SECTION

10. Print name and title then sign and date for. This certifies that you have received the asbestos material covered by this manifest.

11. Discrepancy space. This space is used if there is a discrepancy between the amount of the material received by the landfill and the amount of material listed on the waste shipment form.

NOTE: The waste disposal site operator must retain a copy of this form.

In addition, asbestos waste disposal regulations require that the Waste Disposal Site operators take the following actions:

- Send a copy of the completed and signed Waste Shipment Form to the Waste Generator as soon as possible (but no later than 30 days after disposal) after the waste has been received at the disposal site.
- Notify DEQ immediately by telephone of improperly enclosed or uncovered waste. Submit a written report to DEQ the following working day, along with a copy of the Waste Shipment Form.
- If you discover a discrepancy between the quantity of waste designated on the Waste Shipment Form and the quantity of waste actually received, attempt to reconcile the discrepancy with the Waste Generator. Report in writing to DEQ within 15 days after receiving the waste any that cannot be reconciled. Submit a copy of the Waste Shipment Form with this report.

Instructions for Completing DD Form 836

HAZMAT INST // HAZMAT INST // HAZMAT INST // HAZMAT INST

INSTRUCTIONS FOR COMPLETING DD FORM 836, DANGEROUS GOODS SHIPPING PAPER/DECLARATION AND EMERGENCY RESPONSE INFORMATION FOR HAZARDOUS MATERIALS TRANSPORTED BY GOVERNMENT VEHICLES	
<p>GENERAL</p> <p>DD Form 836 will be completed by a qualified* individual from a transportation office, unit or other organization offering Hazardous Material (HAZMAT) for transportation in areas accessible to the general public.</p> <p>*An individual is considered qualified to complete and sign (certify) DD Form 836, only after having satisfactorily completed either a DOD authorized HAZMAT Course from one of the DOD-approved schools listed in the Defense Transportation Regulation (DTR) or military technical specialist training in accordance with the DTR, Chapter 204, Paragraph D. This person will be appointed in writing by the activity or unit commander, to include scope of authority and expiration date of training.</p> <p>Item 1. Fill in the nomenclature, model number, TCN, and bumper number/serial number of the vehicle/container. For containers carrying sensitive or classified items, the container security seal is required.</p> <p>Item 2. Enter the shipper's address and telephone number of the HAZMAT origination and date of preparation. Telephone number is for NOTIFICATION PURPOSES ONLY. Emergency assistance will be obtained from the 24-HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBER(S) in Item 7c. on the first page of this form.</p> <p>Item 3. Self-explanatory.</p> <p>Item 4a. Enter the identification numbers, e.g., NA, UN. The letters "UN" or "NA" must be noted. "NA" may not be used for OCONUS.</p> <p>Item 4b. Enter the proper shipping name of the HAZMAT and if applicable include the technical name. (Enter additional information as required by 49 CFR, 172.203 - Example: RQ, Inhalation Hazard.) NOTE: In the case of multiple HAZMAT items on the same form with different emergency response telephone numbers, each phone number will be annotated below or adjacent to the HAZMAT item to which they apply.</p> <p>Item 4c. Enter the Hazard class/division and, if applicable, the Compatibility Group.</p> <p>Item 4d. Enter the subsidiary hazard of the material if applicable.</p> <p>Item 4e. Enter the packing group (e.g. I, II, or III) of the HAZMAT.</p> <p>Item 4f. Enter the total number of packages/items.</p> <p>Item 4g. Enter the type of packaging (e.g., container, box, drum, pallet), the HAZMAT is packed in.</p> <p>Item 4h. Enter the total net quantity for non-explosive material in metric measure. US measure may be added in parentheses underneath the metric measure. For ammunition, enter the total number of rounds/articles. Exception: Net total quantity is not required for bulk packages, empty packages, and cylinders of Class 2.</p>	<p>Item 4i. Enter total Net Explosive Weight (NEW) in kilograms for ammunition/ explosive (Class 1 items). NEW information is found in the Joint Hazard Classification System (JHCS) in the entry for the NEW (Transportation Quantity). Example: 27.231 kg.</p> <p>Item 5. Enter the six digit Department of Defense Activity Address Codes (DODAAC) and/or the clear geographical location of the ultimate consignee of the HAZMAT shipment. If this is a unit move, the unit name will be the same as that for Item 2.) Additional information if needed can be annotated in Item 6.</p> <p>Item 6. Additional handling instructions/information.</p> <p>Item 7a. Enter Emergency Response Guide Number.</p> <p>Item 7b. Self-explanatory. Call 24-hour Emergency Response number(s) circled in Item 7c first and then shipper.</p> <p>Item 7c. Circle emergency response telephone number. NOTE: For Radioactive Material Shipments only: Circle numbers and cross out those numbers that do not apply, e.g., Army shipments - cross out all but Army's radioactive response number.</p> <p>Item 8. Certifying person must type or print name legibly in 8a. and must sign in writing (longhand) and add the date signed in 8b.</p> <p>Item 8c. Self explanatory.</p> <p>NOTES:</p> <p>1. Units returning from firing range must have a certified or qualified person to ensure that all HAZMAT is properly repackaged and secured (i.e. braced, blocked, and tied down) prior to being transported back to base. See exception below.</p> <p>2. Completion of a new DD Form 836 is not required. Original DD Form 836 may be used provided that:</p> <p>a. Change Item 2 (Date Prepared).</p> <p>b. Change Item 4. (Cargo):</p> <p>(i) HAZMAT used will be deleted from form by crossing out or lining through.</p> <p>(ii) HAZMAT that remains, but is in different quantities, will have the correct amounts entered in the section(s).</p> <p>EXCEPTION:</p> <p>c. Change Item 8b.:</p> <p>(i) A qualified individual (if available) must sign in writing (longhand). If a qualified individual is not available, then the Officer-In-Charge (OIC) or Non-Commissioned Officer-In-Charge (NCOIC) must sign in writing (longhand) to verify that the above procedures have been performed for the return trip to base.</p> <p>(ii) Cross out original signature if different certifier will be used.</p>

DD FORM 836 (BACK), DEC 2007

HAZMAT INST // HAZMAT INST // HAZMAT INST // HAZMAT INST

HAZMAT // HAZMAT // HAZMAT // HAZMAT // HAZMAT // HAZMAT

DANGEROUS GOODS SHIPPING PAPER/DECLARATION AND EMERGENCY RESPONSE INFORMATION FOR HAZARDOUS MATERIALS TRANSPORTED BY GOVERNMENT VEHICLES												
1. a. NOMENCLATURE:				d. CONTAINER SEAL NO.:								
b. MODEL NO.:				e. SERIAL NO.:								
c. BUMPER NO.:				f. TCN NUMBER:								
2. SHIPPER NAME/ADDRESS/TELEPHONE NO./DATE OF PREPARATION							3. PAGE _____ OF _____ PAGES					
4. CARGO (To be completed by the unit or shipper Transportation Office (TO))												
UN/ID NUMBER a.	PROPER SHIPPING NAME (Include RQ, Technical Names, Additional Information per 49 CFR 172.203, as required.) b.	HAZARD CLASS/ DIVISION c.	SUBSIDIARY HAZARD d.	PACKING GROUP (PG) e.	PACKAGES		TOTAL NET QUANTITY h.	TOTAL AMMO (NEW) i.				
					NUMBER f.	KIND g.						
5. CONSIGNEE NAME												
6. REMARKS												
7. a. COPY OF EMERGENCY RESPONSE GUIDE NUMBER(S)												
b. EMERGENCY NOTIFICATION. In all cases of accident, breakdown or fire, promptly call emergency assistance telephone number(s) in Item 7c below and then shipper and/or consignee in Item 2 above, in that order.												
c. 24-HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBERS:												
DOD NON-EXPLOSIVE HAZMAT: 1-800-851-8061 AT SEA: COLLECT: 1-804-279-3131	DOD HAZ CLASS 1 (EXPLOSIVES) ONLY: (703) 697-0218 or 0219 (COLLECT) OR DSN 227-0218 (WATCH OFFICER)	CHEMICAL/BIOLOGICAL WARFARE MATERIAL DUTY HOURS: DSN 584-3044, 584-7211, 584-6455, Comm. (410) 436-3044, (410) 436-7211, (410) 436-6455 AFTER DUTY HOURS: DSN 584-2148, Comm. (410) 436-2148 (Ask for TEU S3)	SECURE HOLDING: Non-AA&E: 1-800-524-0331 AA&E: 1-800-826-0794 OIL AND CHEMICAL SPILLS: NATIONAL RESPONSE CENTER (NRC) AND TERRORIST HOTLINE: 1-800-424-8802 AT SEA: 202-267-2675 (COLLECT)	DOD RADIOACTIVE MATERIALS: ARMY: (703) 697-0218 (COLLECT) USAF: (202) 767-4011 (COLLECT) USN/MC: Use 24-hour emergency response phone number provided by USN/MC activity initiating shipment. DLA: 1-800-851-8061 (AT SEA: (804) 279-3131)								
8. SHIPPER'S CERTIFICATION This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the regulations of the Department of Transportation.												
a. TYPE OR PRINT NAME OF SHIPPER CERTIFIER				c. SIGNATURE(S) OF VEHICLE OPERATOR(S)								
b. SIGNATURE OF SHIPPER CERTIFIER AND DATE												

DD FORM 836, DEC 2007

PREVIOUS EDITION IS OBSOLETE.

Reset

Adobe Professional 7.0

HAZMAT // HAZMAT // HAZMAT // HAZMAT // HAZMAT // HAZMAT

Chapter 5. Spill Response Procedures

This chapter provides general information on spill response procedures and the Facility Spill Response Plan (FSRP) which must be completed by the Unit or Facility EPOC for all ORARNG facilities unless they are covered by a more comprehensive Spill Prevention Control and Countermeasure (SPCC) Plan or an Integrated Contingency Plan (ICP). Facilities covered by an SPCCP or ICP are identified in the ECN.

This chapter addresses the following topics:

5.1	Safety	page 85
5.2	Spill Response.....	page 85
5.3	Responsibilities	page 89
5.4	Spill Reporting.....	page 91
5.5	Hazards Associated with Chemicals Common to the ORARNG.....	page 92
5.6	Spill Clean Up.....	page 93
5.7	Who Pays?	page 96
5.8	Spill Prevention.....	page 96

5.1 Safety

During any spill response, safety is the most important aspect.

- Ensure all personnel are accounted for and any injured receive medical attention as necessary.
- Establish and enforce a safety zone.
- Keep spectators and other personnel not directly involved in the response out of the spill zone.
- Only respond to a spill if you have been trained to do so in a safe manner.

5.2 Spill Response

Spill response requires two determinations to be made. First you must determine if the spill is an emergency. If you have determined that this is NOT an emergency spill then you must determine if the spill has impacted the environment.

Is the spill an emergency?

An emergency spill is one that cannot be handled immediately by the personnel and equipment on hand at the time of the spill. Notice that this determination is not made specifically by how much substance is spilled, but whether or not the spill can be handled safely and effectively.

When determining whether or not a spill is an emergency consider the following:

- a. Do you know what the spilled substance is?
- b. Does the spilled substance pose a significant danger? In order to determine this you must know what the spilled substance is and the hazards associated with it. (i.e. flammable or poisonous vapors collecting). See Section 5.5 for hazards associated with chemicals common to the ORARNG.
- c. Have you been trained to properly respond to the spill?
- d. Can you stop the flow of the spilled substance safely?
- e. Can you contain the spilled substance safely with the spill response equipment you have on hand?

If you have determined that this is an emergency spill, immediately take the following steps:

- a. Call 911 or initiate your local emergency response system.
- b. Notify the Installation On-Scene Coordinator (IOSC) or your immediate supervisor and your EPOC.
- c. Evacuate all non-response personnel from the area.
- d. Immediately contact AGI-ENV (duty hours) 503-584-3914 or the Oregon Military Department (OMD) Joint Operation Center (after hours) 503-584-2800 and request assistance from AGI Director of Installations.
- e. Complete the Spill Incident Report Form (AGO Form 200-1-9) and submit it to AGI-ENV.
- f. Refer to Appendix A for proper disposal of spill residue.

Must the spill be reported immediately?

A spill must be reported immediately if:

- a. Any amount has contacted any waterway or body of water including any surface water, groundwater, drains or catch basins.
- b. Any amount that is spilled outside of a DEQ-compliant secondary containment.
- c. Any POL spill that exceeds 42 gallons inside a DEQ-compliant secondary containment.

- d. Any amount of HM other than POL is spilled, including spills inside a DEQ-compliant secondary containment.

If you have determined that the spill must be reported immediately, take the following steps:

- a. Stop the flow or source of the spill.
- b. Contain the spill to the smallest possible area using available spill response equipment.
- c. Notify the IOSC or your immediate supervisor and your EPOC.
- d. Immediately contact AGI-ENV (duty hours) 503-584-3914. After hours contact the OMD Joint Operation Center 503-584-2800 and request assistance from AGI Director of Installations.
- e. Complete the Spill Incident Report Form (AGO Form 200-1-9) and submit it to AGI-ENV.

If you have determined that the spill is not an emergency and the spill does not need to be immediately reported, then this is an **Incidental Spill**.

If you have determined that this is an incidental spill, take the following steps:

- a. Stop the flow or source of the spill.
- b. Contain the spill to the smallest possible area and keep it from entering the environment using available spill response equipment.
- c. Notify the IOSC or your immediate supervisor and your EPOC.
- d. Clean up the spill with available equipment.
- e. Complete the Spill Incident Report Form (AGO Form 200-1-9) and submit it to AGI-ENV.

Remember: all spills regardless of size must be cleaned up!

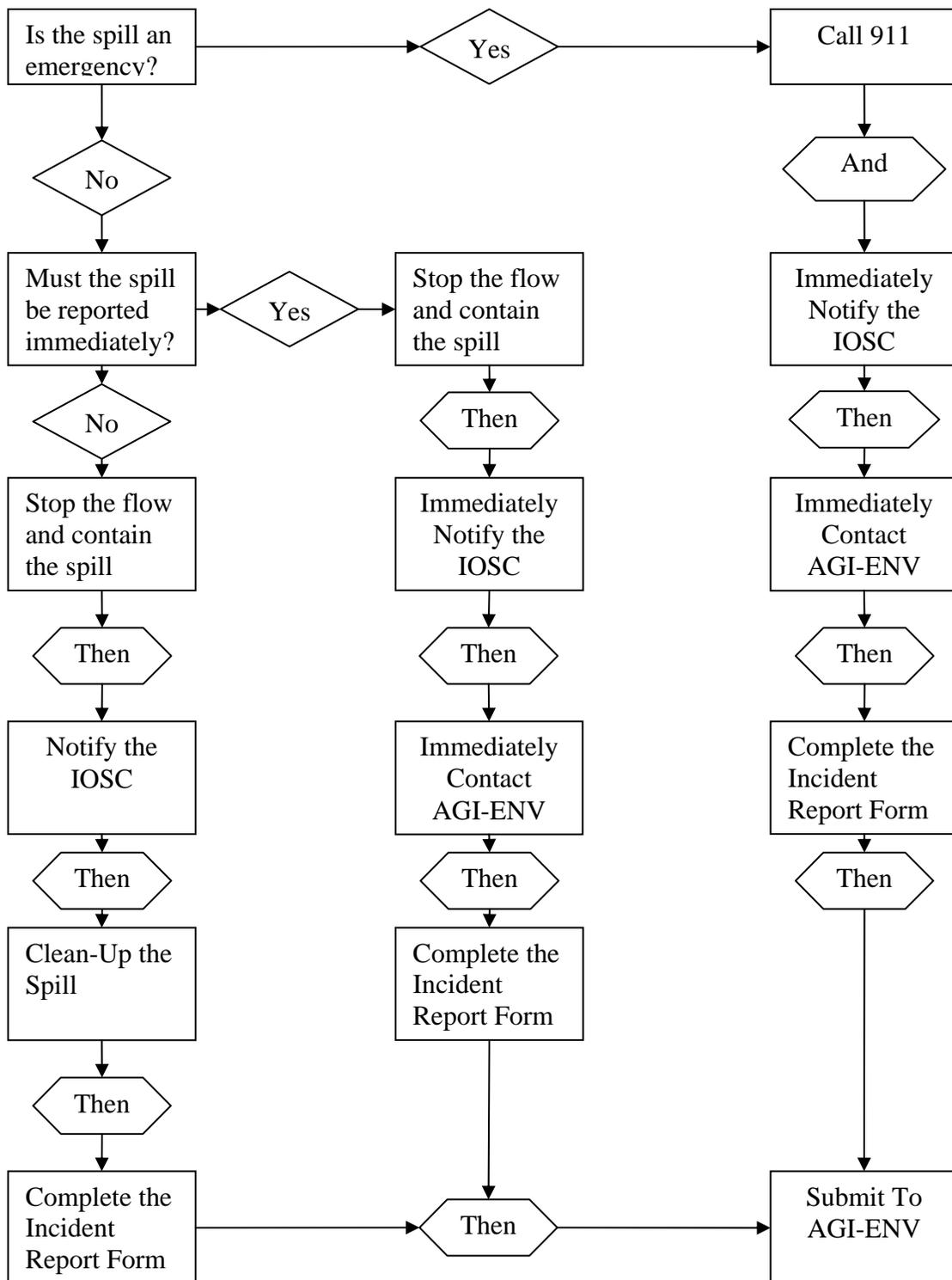


Figure 5-1. Spill Response Flow Chart

Special considerations for local training areas and convoys

When fuel spills occur from the use of mobile equipment not located on an ORARNG facility or during training or convoy operations, the Unit Commander, Convoy Commander, Officer-in-Charge (OIC)/Non-commissioned Officer-in-Charge (NCOIC), or senior person at the site will assume the responsibilities of the IOSC. All steps for spill response listed above must then be followed.

If a spill occurs along a public highway, the IOSC may need to be aware of additional concerns including traffic, road conditions, public health and medical emergencies. The IOSC must specifically be aware that the first public safety official (police, fire or regulatory agency official) on the scene of a spill site should assume control of the spill response. Full cooperation by ORARNG personnel is required.

5.3 Responsibilities

Installation On-Scene Coordinator (IOSC)

Each ORARNG facility with the potential to spill or otherwise discharge regulated materials must designate an IOSC and an Alternate Installation On-scene Coordinator (AOSC) in the FSRP IAW the ECN. This includes all ORARNG facilities. Responsibilities of the IOSC include:

- a. Control the developing situation until emergency crews or outside spill response crews arrive.
- b. Initiate and direct immediate containment and clean-up actions for incidental spills that can be controlled with available personnel and equipment.
- c. Contact AGI-ENV by telephone if not already done.
- d. Secure the site (identify affected area, remove personnel a safe distance, and keep those not involved in the cleanup or response out of the area).
- e. Determine reporting requirements IAW this regulation.
- f. Activate and coordinate actions of response teams, if appropriate to requirements and compatible with personnel and equipment capabilities.
- g. Notify local fire department if fire hazard exists or if assistance is required.
- h. Notify local police if traffic control, security, or other assistance is required.
- i. Coordinate with AGI-ENV for assistance with state and federal agencies, and local government representatives.

- j. Coordinate contact with the news media and the general public through the Public Affairs Office (PAO).
- k. Request outside assistance through AGI-ENV.
- l. Provide status reports to AGI-ENV, as required.
- m. Ensure the Spill Incident Report Form is completed and submitted to AGI-ENV.
- n. Submit recommendations through higher headquarters to AGI-ENV for actions that could prevent or reduce the potential of a similar spill, including facility improvements.

In the absence of the IOSC, the designated AOSC designated in the ECN will assume these responsibilities. If neither IOSC nor AOSC are available, the senior person at the site will assume these responsibilities.

When fuel spills occur from the use of mobile equipment not located on an ORARNG facility or during training operations, the Unit Commander, Convoy Commander, OIC/NCOIC, or senior person at the site will assume the responsibilities of the IOSC.

Environmental Point of Contact (EPOC)

Responsibilities of the Unit or Facility EPOC include:

- a. Ensuring adequate spill equipment and materials are available on site to contain and clean up potential spills at the unit or facility.
- b. Completing the Spill Incident Report Form and submit to AGI-ENV within 72 hours by e-mail or fax.
- c. Completing and maintaining a current FSRP.
- d. Posting emergency contact portions of the FSRP near phones at the facility.
- e. Placing a copy of the FSRP in the ECN and submit a copy to AGI-ENV.

ORARNG Environmental Office (AGI-ENV)

AGI-ENV personnel are responsible for:

- a. Contacting the Oregon Emergency Management Division (EMD) Oregon Emergency Response System (OERS) as required.
- b. Contacting Oregon DEQ and update DEQ, as required.
- c. Contacting Oregon DOT, as required.

- d. Contacting the National Response Center (NRC), as required.
- e. Contacting the National Guard Bureau, Environmental Division (NGB-ARE), as required.
- f. Contacting ORARNG PAO, as required.
- g. Ensuring all response activities are conducted IAW all applicable regulations and ORARNG plans and policies.

5.4 Spill Reporting

In the event of any spill:

- Report the spill directly to the IOSC and the unit/facility EPOC.
- You or the IOSC or EPOC will report the spill by phone to the ORARNG Spill Response Coordinator at the main installation number **503-584-3914**. This verbal report must be made immediately for emergencies and other spills as determined in Section 5.2 above.

During non-duty hours or if you are not able to contact the environmental office, call the ORARNG Joint Operation Center at 503-584-2800 and request assistance from AGI Director of Installations.

- The EPOC or IOSC will complete the Spill Incident Report Form AGO 200-1-9 and submit to AGI-ENV by e-mail or fax within 72 hours.

Reports to the ORARNG chain of command, PAO, and external agencies such as the Oregon EMD and NRC will be made by personnel in AGI-ENV.

Table 5-1. Emergency Response Notification Phone Numbers

Office	Office or Other Information	Phone
Spill Response Coordinator	AGI-ENV	503-584-3545
Alternate Spill Response Coordinator	AGI-ENV	503-584-3551
Environmental Program Manager	AGI-ENV	503-584-3868
ORARNG Joint Operation Center	(1600hrs - 0800hrs)	503-584-2800

The following phone numbers should only be used in the event that you are not able to contact the environmental office (AGI-ENV) or Joint Operation Center at the numbers listed in Table 5-1. Contact should be attempted in the following order:

Table 5-2. Emergency Response Reporting Phone Numbers

Office	Office or Other Information	Phone
Operations and Maintenance Chief	AGI	503-584-3596
Director of Installations	AGI	503-584-3914
Director of Plans, Operations and Training	DCSOPS	503-584-3996
Director of Logistics	DOL	503-584-3909
United States Property and Fiscal Office	USPFO	503-584-3943
Public Affairs Office	PAO	503-584-3917
Chief of Staff	CoS	503-584-3989
Oregon Emergency Management Division	Oregon Emergency Response System (OERS)	1-800-452-0311
National Response Center	US EPA and US Coast Guard	1-800-424-8802

5.5 Hazards Associated with Chemicals Common to the ORARNG

The following HMs are examples of those most commonly used at ORARNG facilities which are subject to spills.

Petroleum, Oil, and Lubricants (POL)

Motor oil, brake, hydraulic, and transmission fluids, and antifreeze are the most common substances spilled in the ORARNG. Although generally considered low hazard, minimum personal protective equipment (PPE) should be worn when responding to and cleaning up these substances. See Section 5.6 for minimum PPE.

Acids

Battery acid used for battery maintenance is the most common acid that may be spilled in the ORARNG. Extreme caution should be used whenever cleaning up spills of concentrated acids. Acids can easily damage the skin and eyes and vapors can cause damage to the lungs. Only attempt to clean up the spill if you are in a well ventilated area and can do so safely. Use the acid neutralizing kit which should be available in the battery storage and maintenance room if you are using acids for battery maintenance. Always read the MSDS for proper PPE.

Caustics (bases)

Concentrated detergents and other cleaning supplies are often very strong caustic substances. Extreme caution should be used when cleaning up spills of these substances as they can easily damage skin and eyes. Always read the MSDS for proper PPE.

Flammable and Combustible Liquids

MOGAS, JP-8 and diesel fuel are the most common flammable and combustible materials likely to be spilled in the ORARNG. In addition to damaging the skin and eyes, and vapors damaging the lungs, the vapors from these substances are flammable. Clean up should only be attempted if the substance is in a well ventilated area. Be sure there is no potential source of spark or ignition. Do not allow anyone to use power tools until after the substance has been cleaned up and sufficient time has past to allow vapors to dissipate. Always read the MSDS for proper PPE.

5.6 Spill Clean Up

All spills must be cleaned up as soon as practical, without risk of injury or significant exposure to personnel. For other than incidental spills, AGI-ENV will coordinate and supervise the unit or external agencies for clean up as necessary.

Spill clean-up can only begin when:

- The source of the spill has been stopped.
- The flow of liquid has stopped.
- All liquid is contained.

Personal Protective Equipment (PPE)

At a minimum, the following PPE will be worn in addition to your duty uniform (battle dress uniform or coveralls) during any spill clean up. Additional PPE may be required.

- Nitrile gloves
- Protective goggles or face shield
- Work boots

Note Always check the MSDS of the spilled substance to determine proper PPE.

Materials

Limited spill response equipment and supplies are maintained for immediate use. Examples of recommended spill response equipment and supplies that should be available to personnel at the facility are listed in Table 5-3. Actual requirements should be addressed in the FSRP for your site.

Table 5-3. Recommended Spill Response Equipment and Supplies

Personal Protective Equipment (PPE)	Spill Response Equipment	Spill Response Supplies
<ul style="list-style-type: none"> • Gloves • Boots • Goggles • Duct tape 	<ul style="list-style-type: none"> • Overpack drums • 5-gallon containers • Plastic bags • Rakes (non-sparking) • Non-sparking shovels • Push brooms • Caution tape • Sand bags 	<ul style="list-style-type: none"> • Absorbent pads • Absorbent booms/socks • Granular absorbent (e.g., oil-dry or kitty litter) • Absorbent pillows • Drain covers

Clean Up Steps

1. Soak up all liquids by mixing the spilled material with the absorbent and pads, use a plastic rake or plastic shovel until there is no free flowing liquid.
2. Scoop all contaminated absorbent, pads and booms into trash bags and double bag.
3. Place all bags into drums approved for waste disposal.
4. Mark and label the drum for disposal IAW this Plan.
5. Dispose of all waste IAW the waste disposal chapter of this Plan.

The EPOC is responsible for maintaining enough spill response equipment at the facility to respond to types and quantities of hazardous chemicals and waste on site. If spill response equipment is needed, order supplies through normal channels. Table 5-4 provides the NSN for a list of common spill response equipment.

Table 5-4. Spill Response Equipment and Supplies Ordering Information

NSN	Product Name	Description	Absorbent Capacity (Total)
Absorbent Materials			
4230-01-436-8877	Versatile Container Kit	Pre-assembled kit that contains socks, pillows, mats, disposal bags and ties, instruction manual, labels, and polyethylene kit	34 gallons
4235-01-420-3099	Large Overpack Kit 959A1	Pre-assembled kit that contains socks, drain blocker mat, pads, pillows, floor sweep, wipers, disposal bags, emergency response guidebook, instruction manual, labels, polyethylene overpack drum with threaded lid	64 gallons
4235-01-424-3130	Spill Kit	1 polyethylene mobile response kit, 10 socks 3"x4', 8 pillows 9" x 9", 4 pillows 18" x 18", 30 Pads 17" x 19", 5 disposal bags w/ties, 1 pair of splash-resistant goggles, 1 pair of nitrile gloves, 5 HM labels, and 1 box of degreaser wipes	15.5 gallons
7930-01-363-8631	Pads	100 double-weight pads 16" X 20"	25 gallons
9330-01-308-5151	Pillow	100 pillows 17" X 16" 2" thick	1 gallon
7930-01-455-9536	Mat Rolls	37 lb. heavy-weight roll	47 gallons
7930-01-387-8923	Socks	55 socks, 24 in. L, 3 in. diameter	20 gallons
7930-01-436-8315	Socks	8 socks, 10 ft. L	15 gallons
7930-01-301-2646	Socks	40 socks, 42 in. L, 3 in. diameter	20 gallons
9930-01-379-8367	Absorbent	1-50 quart (25 lbs) bag absorbent	
9930-01-436-8317	Lite-dry Absorbent	1 bag (22 lbs) granular absorbent	8 gallons
8135-01-324-2664	Zononlite Industrial Vermiculite	Granular absorbent	
4235-01-379-8354	Absorbent	Granular absorbent, 12-pound bag, oil only	
7930-01-436-8316	Pillows	10 large absorbent pillows	10 gallons
7210-LP-X19-2917	Pillow		
7930-01-145-5797	25 lb bag absorbent		
Plastic Bags			
8105-01-183-9769	32-gallon heavy duty, brown or green, 125 per box		
8105-01-183-9764	32-gallon heavy duty, 75 lbs capacity, brown or green		
Hand Tools			
LPL, DA Form 1348-65	Safety shovel (Request from USPFO: Local Purchase List (LPL))		

5.7 Who Pays?

This section details which activity, unit, or organization is responsible for funding the various aspects of spill response.

Spill supplies and equipment

- Spill supplies and equipment should be ordered through normal supply channels.
- Funding for spill supplies is the same as for all other supplies.

Spill clean-up

- Whenever spills occur, the money spent on clean up is money that could have been spent on training.
- Any costs incurred for spill clean up can be billed to the unit. Funding will be decided on a case by case basis depending on the circumstances.
- In the event of an emergency or a spill too large to be handled by personnel with equipment on-site, AGI-ENV or the USPFO will contract for spill clean-up.
- Spills that occur on training sites will normally be cleaned up by the unit or if necessary by the host. Any costs incurred for clean up can be billed back to the unit.

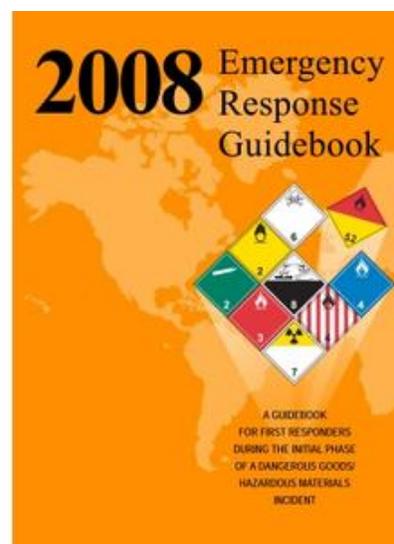
5.8 Spill Prevention

Facility Spill Response Plan

Located in the ECN is the Facility Spill Response Plan (FSRP) that is applicable to all installations or facilities that do not require a SPCC Plan or an Installation Spill Contingency Plan (ISCP). It must be completed by the Unit/Facility EPOC with appropriate portions posted and/or filed in the ECN. If you have any questions about how to complete the FSRP, contact the spill coordinator at 503-584-3545.

Spill Response Guide and ERG

The AGO Form SRG-1/2 (Spill Response Guide) will be kept in the logbook of each ORARNG vehicle and can be used for quick reference in spill response requirements. The U.S. DOT Emergency Response Guidebook (ERG) should be kept in any ORARNG vehicle transporting HM. If you have any questions about how to use these guides, contact AGI-ENV.



Appendix A Waste Protocol Sheets

Using Waste Protocol Sheets	page 99
A01 – Absorbents – Hazardous Substances	page 101
A02 – Absorbents – Non-hazardous Substances	page 102
A03 – Adhesives	page 103
A03 – Adhesives continued.....	page 104
A04 – Aerosol Can Liquid Residues	page 105
A05 – Aerosol Cans	page 106
A06 – Alcohol	page 107
A06 – Alcohol continued	page 108
A07 – Antifreeze.....	page 109
A08 – Asbestos	page 110
A09 – Ballasts	page 111
A10 – Batteries – Universal Waste	page 112
A11 – Batteries, Lead Acid, Automotive	page 114
A12 – Blast Media	page 115
A13 – Bulbs – Universal Waste	page 116
A14 – Calcium Hypochlorite.....	page 117
A14 – Calcium Hypochlorite continued.....	page 118
A15 – Cylinders	page 119
A15 – Cylinders continued	page 120
A16 – Fuel Filters	page 121
A17 – Off-specification Fuel.....	page 122
A18 – Grease GAA	page 123
A19 – Lead Contaminated Firing Range Debris	page 124
A20 – Oil Filters, Used	page 125
A21 – Oils, Used	page 126
A22 – Paint and Primer – Latex	page 127
A23 – Paint Related Material	page 128
A23 – Paint Related Material continued.....	page 129
A24 – Parts Washer Filter and Solutions	page 130
A24 – Parts Washer Filter and Solutions continued	page 131
A25 – Rags – Laundered	page 132
A26 – Sludge – Catchbasins, Washrack, Oil/water Separator and Sump Water	page 133

A26 – Sludge – Catchbasins, Washrack, Oil/water Separator and Sump Water continued *page 133*
A27 – Tires..... *page 135*
A28 – Weapon Cleaning Material – Patches, Swabs, and Rags..... *page 136*

USING WASTE PROTOCOL SHEETS

In order to simplify the waste management process, specific handling procedures for wastes commonly generated by the ORARNG have been developed in the form of a Waste Protocol Sheet (WPS). The WPSs are designed to be easy-to-follow and contain step-by-step instructions on how to manage each waste stream.

To use the WPSs, find the particular waste you are looking for from the above index and turn to that sheet. The handling procedures are self-explanatory. It is **very important** that the waste *meets the description* in the WPS. If it does not, or if you cannot find your waste in the index, contact the HWM at AGI-ENV for guidance.

Refer to Chapter 3 for additional information regarding the management of waste and Chapter 4 for additional directions on turning in hazardous materials and waste.

This page intentionally left blank.

A01 – ABSORBENTS – HAZARDOUS SUBSTANCES

CHARACTERIZATION

Absorbents contaminated with hazardous materials such as solvents or acetone must be managed as **hazardous waste**.

If there is not a WPS created for the contaminant, refer to the MSDS for the product.

EPA Hazardous Waste Number: Dependent on the type of hazardous material absorbed; contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a removable head plastic or metal UN/NA drum (see Table 3-4) for accumulation.

Step 2 **Attach a Hazardous Waste label to the side of the container.**

- Write: *Used Absorbent with (list HM)* on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE listed on the MSDS.**

Step 5 **Put absorbent in the container.**

- Place lid back on the container securely.

Step 6 **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Fill out Waste Turn-In Form AGO 200-1-14.**

Step 2 **Make an appointment** for turn-in.

Step 3 **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A02 – ABSORBENTS – NON-HAZARDOUS SUBSTANCES

CHARACTERIZATION

POL contaminated absorbents like brake fluid, engine oil, and hydraulic fluid **are non-hazardous waste**.

If there is not a WPS created for the contaminant, refer to the MSDS for the product.

Note: If unsure if absorbed contaminate is non-hazardous waste contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.** Use a removable head plastic or metal drum (see Table 3-4) for accumulation.
- Step 2** **Attach a Non-hazardous Waste label to the side of the container.**
- Write: *Used Absorbent with (list HM)* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE listed on the MSDS.**
- Step 5** **Put absorbent in the container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A03 – ADHESIVES

CHARACTERIZATION

Unserviceable and or expired adhesives is normally a **hazardous waste**.

EPA Hazardous Waste Numbers: **D001**

- Any additional EPA hazardous waste numbers will be dependant on MSDS - contact supporting maintenance shop or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 Select an approved container.

- Keep adhesive in original container
- Use a removable head UN/NA poly container (see Table 3-4) for accumulation.

Step 2 Attach a Hazardous Waste label to the side of the container.

- Write: *Waste Adhesive* on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 Place container in a proper accumulation area.

Step 4 Wear proper PPE listed on the MSDS.

Step 5 Place adhesive in UN/NA poly container.

- Place lid back on the container securely.

Step 6 Document the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 Fill out Waste Turn-In Form AGO 200-1-14.

Step 2 Make an appointment for turn-in.

Step 3 E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 Bring paperwork and waste to next level of turn-in at scheduled **appointment time and date**.

A03 – ADHESIVES CONTINUED

SHIPPING INFORMATION FOR SELF TRANSPORT

Adhesive can be a **DOT hazardous material**. For self transport over public highways take the following steps.

- Step 1** Fill out and attach the Yellow Hazardous Waste Label.
- Place directly over the Red Hazardous Waste Label.

Step 2 Attach the appropriate **DOT label** to the side of the **container** next to the hazardous waste label.

Step 3 Fill out **DD Form 836** and transport with the hazardous waste.

Generator Name and Address:	Your Information	
EPA #:	CEG	
EPA/DOT Shipping Name:	Waste, Adhesive	
Hazard Class:	3	
PG:	II	
UN/NA No:	UN1133	
EPA Waste Code/Characteristic:	D001 at a minimum	
Accumulation Start Date:	Accumulation Start Date from Red Label	

A04 – AEROSOL CAN LIQUID RESIDUES

CHARACTERIZATION

Aerosol can residue is a hazardous waste.

EPA Hazardous Waste Number: **D001**

- Any additional EPA hazardous waste numbers will be dependant on the results of analysis that is performed.

Note: Ensure hazardous material ingredients are compatible prior to puncturing product in container.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a non-removable head UN/NA rated container (see Table 3-4) for accumulation.

Step 2 **Attach a Hazardous Waste label to the side of the container.**

- Write: *Waste Aerosol Can Liquid* on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE** listed on the MSDS.

Step 5 **Put waste in the container.**

- Place lid back on the container securely.
- Properly ground metal containers when transferring ignitable waste.

Step 6 **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Fill out Waste Turn-In Form AGO 200-1-14.**

Step 2 **Make an appointment** for turn-in.

Step 3 **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A05 – AEROSOL CANS

CHARACTERIZATION

Unserviceable or empty unspirated aerosol cans are a **hazardous waste**.

EPA Hazardous Waste Number:

- If flammable: **D001 and D003**
- If nonflammable: **D003**

If unsure how to identify aerosol can contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.**
- Use a removable head UN/NA poly container (see Table 3-4) for accumulation.
- Step 2** **Attach a Hazardous Waste label to the side of the container.**
- Write: *Waste Aerosol Can* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE listed on the MSDS.**
- Step 5** **Place aerosol can in UN/NA poly container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A06 – ALCOHOL

CHARACTERIZATION

Unserviceable and or expired alcohol is a **hazardous waste**.

EPA Hazardous Waste Numbers: **D001**.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.**
- Keep alcohol in original container
 - Use a removable head UN/NA poly container (see Table 3-4) for accumulation.
- Step 2** **Attach a Hazardous Waste label to the side of the container.**
- Write: *Waste Alcohol* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE listed on the MSDS.**
- Step 5** **Place alcohol in UN/NA poly container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A06 – ALCOHOL CONTINUED

SHIPPING INFORMATION FOR SELF TRANSPORT

Alcohol is a **DOT hazardous material**. For self transport over public highways take the following steps.

- Step 1** Fill out and attach the Yellow Hazardous Waste Label.
 - Place directly over the Red Hazardous Waste Label.

- Step 2** Attach the appropriate **DOT label** to the side of the **container** next to the hazardous waste label.

- Step 3** Fill out **DD Form 836** and transport with the hazardous waste.

Generator Name and Address:	Your Information	
EPA #:	CEG	
EPA/DOT Shipping Name:	Waste, Isopropyl Alcohol	
Hazard Class:	3	
PG:	II	
UN/NA No:	UN1219	
EPA Waste Code/Characteristic:	D001	
Accumulation Start Date:	Accumulation Start Date from Red Label	

A07 – ANTIFREEZE

CHARACTERIZATION

Antifreeze no longer used for its intended purpose is a **non-hazardous waste**.

Note: Maintenance shops that recycle their antifreeze with a contractor can disregard Step 2 of Container Marking/Labeling and Handling Procedures and all the Turn-in procedures listed below.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.** Use a non-removable head plastic or metal drum (see Table 3-4) for accumulation.
- Step 2** **Attach a Non-hazardous Waste label to the side of the container.**
- Write: *Antifreeze* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE** listed on the MSDS.
- Step 5** **Put waste in the container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A08 – ASBESTOS

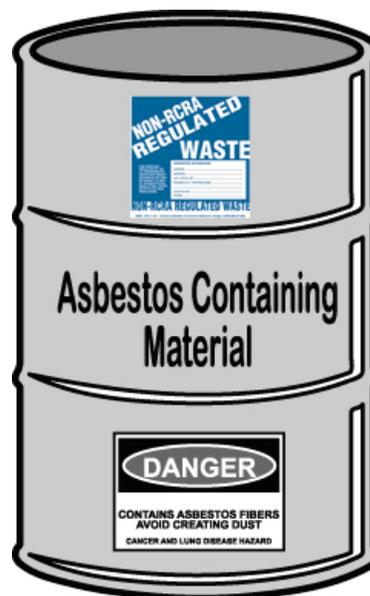
Brake Shoes, Mittens, Floor Tiles, Clutch Plates, Fire Suits, Safes and Blankets

CHARACTERIZATION

Asbestos material no longer used for its intended purpose is a non-RCRA regulated waste.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** Select an approved container. Use a removable head UN/NA rated container (see Table 3-4) for accumulation.
- Step 2** Attach a Non-RCRA Regulated Waste label to the side of the container.
- Write: Asbestos on the Proper DOT Shipping Name line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 2** Attach a *Danger – Contains Asbestos* label or write on the container **Asbestos Containing Material**.
- Step 3** Place container in a proper accumulation area.
- Step 4** Wear proper PPE listed on the MSDS.
- Step 5** Put waste in the container.
- Place lid back on the container securely.
- Step 6** Document the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form 200-1-6.



TURN-IN PROCEDURES

- Step 1** Fill out Waste Turn-In Form AGO 200-1-14.
- Step 2** Fill out Oregon DEQ form ASN-4
- Step 2** Make an appointment for turn-in.
- Step 3** E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** Bring paperwork and waste to next level of turn-in at scheduled appointment time and date.

A09 – BALLASTS

PCB and Non-PCB

CHARACTERIZATION

Ballasts:

- PCB ballast is a **special waste**.
- Non-PCB ballast is a **non-hazardous waste**.

Note: PCB ballasts MUST be turned in within **nine months** of Out of Service Date to insure the PCB ballasts are picked up from contractor within one year.

Out of service date starts when the first ballast is taken out of service and put into a container.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 Select an approved container.

- **PCB** – Use a removable head UN/NA container (see Table 3-4) for accumulation.
- **Non-PCB** – Use a removable head UN/NA container (see Table 3-4) for accumulation.

Step 2 PCB –

- Attach a **Special Waste** label on the **side** of the container.
- Write: Waste PCBs on the Contents line.

Non-PCB –

- Attach a **Non-hazardous waste** label on side of the container.
- **Non-PCB Ballasts** on content line.

Step 3 Place container in a proper accumulation area.

Step 4 Wear proper PPE listed on the MSDS.

Step 5 Put ballast in the container.

- Place lid back on the container securely.

Step 6 Document the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 Fill out Waste Turn-In Form AGO 200-1-14.

Step 2 Make an appointment for turn-in.

Step 3 E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 Bring paperwork and waste to next level of turn-in at scheduled appointment time and date.

A10 – BATTERIES – UNIVERSAL WASTE

Alkaline, Lithium, Alkaline/Mercury, Magnesium, Mercury, Metal Halide, Nickel-Cadmium, Sealed Lead-Acid, and Zinc

CHARACTERIZATION

Universal Waste

Note: If battery is not identified in this WPS, contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 Select an approved container.

- **Segregate** batteries by **Type**.
- Select a structurally sound container - original box, recycled box, or bucket large enough to hold batteries for accumulation.
- Batteries that are DOT hazardous material – select UN/NA container (see Table 3-4)

Step 2 Attach a Universal Waste label to the side of the container.

- Write: Battery on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 Place container in a proper accumulation area.

Step 4 Wear proper PPE listed on the MSDS.

Step 5 Put waste in the container.

- Place lid back on the container securely.

Step 6 Document the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 Fill out Waste Turn-In Form AGO 200-1-14.

Step 2 Make an appointment for turn-in.

Step 3 E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 Bring paperwork and waste to next level of turn-in at scheduled appointment time and date.

**SHIPPING INFORMATION
FOR SELF TRANSPORT**

Some batteries are a **DOT hazardous material**. For self transport of DOT hazardous material batteries over public highways take the following steps.

- Step 1** Mark the container with:
- Proper Shipping Name
 - ID#

Step 2 Attach the appropriate **DOT label** to the side of the **container** next to the hazardous material marking.

Step 3 Fill out **DD Form 836** and transport with batteries.

Battery Type	Container Accumulation Markings	Transportation Markings	Hazard Class Label
Alkaline, Alkaline/Mercury, Metal Hydride and Zinc	Universal Waste – Batteries – <i>list type of battery</i>	Batteries, Dry, Containing Potassium Hydroxide Solid / 8 / UN3028 / III	
Lithium	Universal Waste – Batteries – Lithium	Lithium Batteries/ 9 / UN3090 / II	
Magnesium	Universal Waste – Batteries – Magnesium	Non-regulated	Non- regulated
Mercury	Universal Waste – Batteries – Mercury	Non-regulated	Non- regulated
Sealed Lead-Acid	Universal Waste – Batteries – Sealed Lead-Acid	Batteries, Wet, Filled with Acid / 8 / UN2794 / III	
Ni-Cd	Universal Waste – Batteries – Ni-Cad Wet	Batteries, Wet, Filled with Alkali / 8 / UN2795 / III	

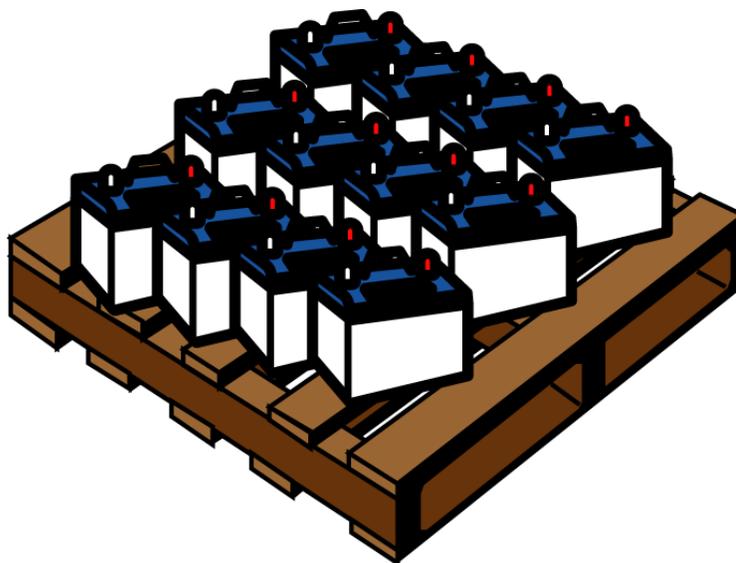
A11 – BATTERIES, LEAD ACID, AUTOMOTIVE

CHARACTERIZATION

Lead-acid batteries are managed as recyclable materials. If batteries cannot be recycled through a contract, contact the HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** Until batteries are exchanged, stack them on pallets in an area **with secondary containment**.
- Step 2** Mark and label the batteries or battery storage area "Lead-acid Batteries."
- Step 3** Make sure pallet is in a proper accumulation area.
- Step 4** Wear proper PPE listed on the MSDS.
- Put batteries on the pallet.



TURN-IN PROCEDURES

- Step 1** When ready for turn-in, a contractor picks up and replaces batteries at each maintenance shop, as needed.

A12 – BLAST MEDIA

CHARACTERIZATION

Blast media has a strong potential to be **hazardous waste**.

EPA Hazardous Waste Number:

- EPA hazardous waste numbers will be dependant on the results of analysis that is performed.

Contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.** Use a removable head UN/NA rated container (see Table 3-4) for accumulation.
- Step 2** **Attach a Hazardous Waste label to the side of the container.**
- Write: *Waste Blast Media* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE** listed on the MSDS.
- Step 5** **Put waste in the container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A13 – BULBS – UNIVERSAL WASTE

Halogen, Incandescent, Fluorescent, Mercury Vapor, Metal Halide, Neon, Sodium Bulbs

CHARACTERIZATION

Universal Waste

Note: If a bulb is not identified in this WPS, contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** Select an approved container.
- Structurally sound container - original box, recycled box, or bucket large enough to hold bulbs for accumulation.
 - Each **Type** of bulb should be segregated.
- Step 2** Attach a Universal Waste label to the side of the container.
- Write: *Bulb* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** Place container in a proper accumulation area.
- Step 4** Wear proper PPE listed on the MSDS.
- Step 5** Put waste in the container.
- Place lid back on the container securely.
- Step 6** Document the monthly amount of waste generated in **pounds** on the "Hazardous Waste Determination Worksheet" AGO Form 200-1-6.



TURN-IN PROCEDURES

- Step 1** Fill out Waste Turn-In Form AGO 200-1-14.
- Step 2** Make an appointment for turn-in.
- Step 3** E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** Bring paperwork and waste to next level of turn-in at scheduled **appointment time and date**.

A14 – CALCIUM HYPOCHLORITE

CHARACTERIZATION

Unserviceable and/or expired calcium hypochlorite is a **hazardous waste**.

EPA Hazardous Waste Numbers: **D001 and D003**.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a removable head UN/NA poly container (see Table 3-4) for accumulation.

Step 2 **Attach a Hazardous Waste label to the side of the container.**

- Write: *Waste Calcium Hypochlorite* on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE** listed on the MSDS.

Step 5 **Place calcium hypochlorite in UN/NA poly container.**

- Place lid back on the container securely.

Step 6 **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Fill out Waste Turn-In Form AGO 200-1-14.**

Step 2 **Make an appointment** for turn-in.

Step 3 **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A14 – CALCIUM HYPOCHLORITE CONTINUED

SHIPPING INFORMATION FOR SELF TRANSPORT

Calcium hypochlorite is a **DOT hazardous material**. For self transport over public highways take the following steps.

- Step 1** Fill out and attach the Yellow Hazardous Waste Label.
- Place directly over the Red Hazardous Waste Label.

Step 2 Attach the appropriate **DOT label** to the side of the **container** next to the hazardous waste label.

Step 3 Fill out **DD Form 836** and transport with the hazardous waste.

Generator Name and Address:	Your Information	
EPA #:	CEG	
EPA/DOT Shipping Name:	Waste Calcium Hypochlorite, Dry	
Hazard Class:	5.1	
PG:	II	
UN/NA No:	UN1748	
EPA Waste Code/Characteristic:	D001, D003	
Accumulation Start Date:	Accumulation Start Date from Red Label	

A15 – CYLINDERS

Ether Starter and Propane Cylinders

CHARACTERIZATION

Ether starter and propane cylinders that are **not depressurized** are managed as **hazardous waste**.

EPA Hazardous Waste Number: **D001 and D003**

Note: If a cylinder is not identified in this WPS, contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a removable head UN/NA rated container (see Table 3-4) for accumulation.

Step 2 **Attach a Hazardous Waste label to the side of the container.**

- Write: *Waste Cylinders* on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE listed on the MSDS.**

Step 5 **Put waste in the container.**

- Place lid back on the container securely.

Step 6 **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Fill out Waste Turn-In Form AGO 200-1-14.**

Step 2 **Make an appointment** for turn-in.

Step 3 **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A15 – CYLINDERS CONTINUED

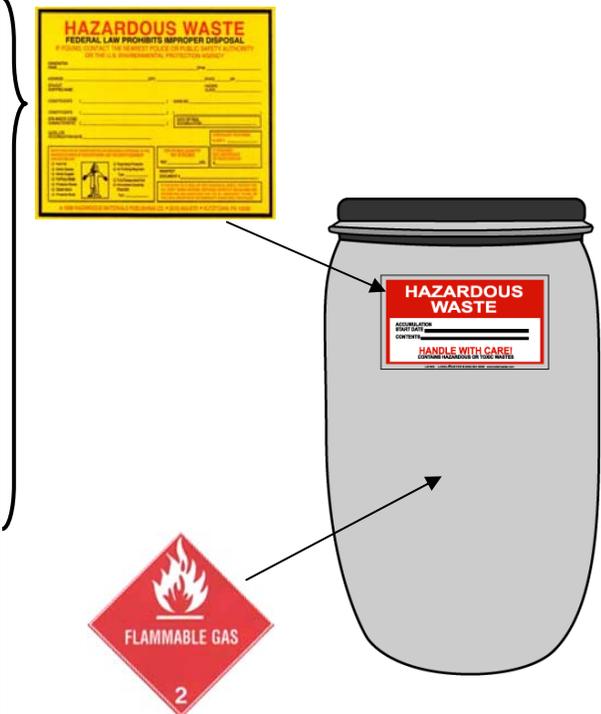
SHIPPING INFORMATION FOR SELF TRANSPORT

Cylinders are a **DOT hazardous material**. For self transport over public highways take the following steps.

- Step 1** Fill out and attach the Yellow Hazardous Waste Label.
- Place directly over the Red Hazardous Waste Label.

Step 2 Attach the appropriate **DOT label** to the side of the **container** next to the hazardous waste label.

Step 3 Fill out **DD Form 836** and transport with the hazardous waste.

Generator Name and Address:	Your Information	
EPA #:	CEG	
EPA/DOT Shipping Name:	Waste Compressed Gas Flammable NOS (list ether or propane)	
Hazard Class:	2.1	
PG:		
UN/NA No:	UN1954	
EPA Waste Code/Characteristic:	D001, D003	
Accumulation Start Date:	Accumulation Start Date from Red Label	

A16 – FUEL FILTERS

JP-8, and MOGAS

CHARACTERIZATION

JP8 and MOGAS fuel filters are managed as **hazardous waste**.

EPA Hazardous Waste Number:

- If **no** liquid present: **D018**
- If **any** liquid is present: **D001 and D018**.

For diesel fuel filters and oil filters see WPS A24.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a removable head UN/NA rated container (see Table 3-4) for accumulation.

Step 2 **Attach a Hazardous Waste label to the side of the container.**

- Write: *Waste Fuel Filters* on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE** listed on the MSDS.

Step 5 **Put waste in the container.**

- Place lid back on the container securely.
- Properly ground metal containers when transferring ignitable waste.

Step 6 **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Fill out Waste Turn-In Form AGO 200-1-14.**

Step 2 **Make an appointment** for turn-in.

Step 3 **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A17 – OFF-SPECIFICATION FUEL

JP-8, Diesel, and MOGAS

CHARACTERIZATION

JP8, Diesel and MOGAS can usually be recycled. If fuel is contaminated and no longer able to recycle see the HWM for assistance.

Note: Maintenance shops should have written communication with commercial vendor on how off-specification fuel is managed and picked up from the shop.

If fuel is not recycled or possibly contaminated, contact the supporting maintenance shop EPOC or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a non-removable head UN/NA rated container (see Table 3-4) for accumulation.

Step 2 Write: *Off-Specification Fuel* on the side of container.

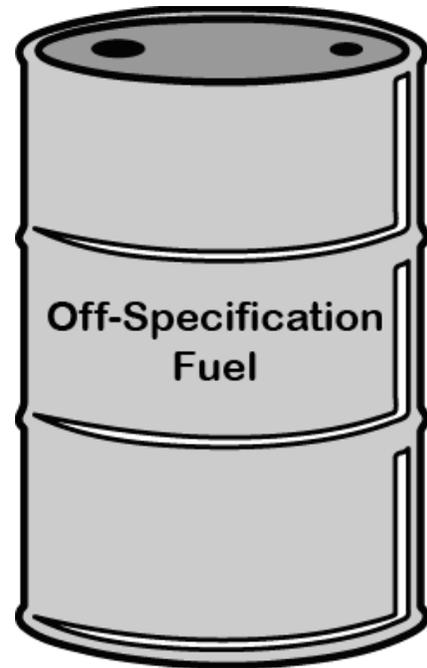
Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE** listed on the MSDS.

Step 5 **Put waste in the container.**

- Place lid back on the container securely.
- Properly ground metal containers when transferring ignitable waste.

Step 6 **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Contact the contractor to have fuel picked up.**

Step 2 **Maintain invoice or contractual agreement.**

A18 – GREASE GAA

CHARACTERIZATION

Unserviceable or used General Automotive and Artillery (GAA) **grease** is normally **non-hazardous waste**.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.** Use a removable head plastic or metal drum (see Table 3-4) for accumulation.
- Step 2** **Attach a Non-hazardous Waste label to the side of the container.**
- Write: *Used grease* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE listed on the MSDS.**
- Step 5** **Put grease in the container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A19 – LEAD CONTAMINATED FIRING RANGE DEBRIS

CHARACTERIZATION

Lead contaminated firing range debris is **hazardous waste**.

EPA Hazardous Waste Numbers: **D008**.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.**
- Use a removable head UN/NA poly container (see Table 3-4) for accumulation.
- Step 2** **Attach a Hazardous Waste label to the side of the container.**
- Write: *Waste Lead Debris* on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE listed on the MSDS.**
- Step 5** **Place lead debris in UN/NA poly container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A20 – OIL FILTERS, USED

CHARACTERIZATION

Used oil filters are **non-hazardous waste**.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** Select an approved container. Use a removable head plastic or metal drum (see Table 3-4) for accumulation.
- Step 2** Attach a Non-hazardous Waste label or write the words **Used Oil Filters** to the side of the container.
- Write: *Used Oil Filters* on the Contents line.
- Step 3** Place container in a proper accumulation area.
- Step 4** Wear proper PPE listed on the MSDS.
- Step 5** Put oil filters in the container.
- Place lid back on the container securely.
- Step 6** Document the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** Fill out Waste Turn-In Form AGO 200-1-14.
- Step 2** Make an appointment for turn-in.
- Step 3** E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** Bring paperwork and waste to next level of turn-in at scheduled appointment time and date.

A21 – OILS, USED

CHARACTERIZATION

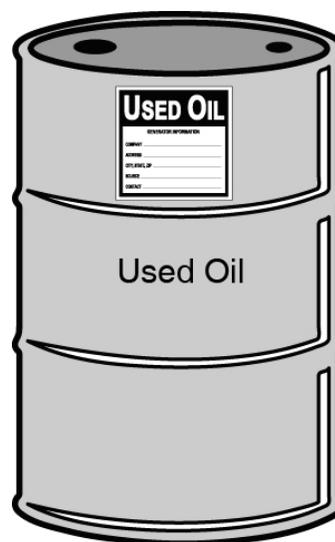
Used oil is a **recyclable material**.

Oils include motor oil, differential fluid, transmission oil, hydraulic oil, gear oil, lubricating oil, and brake fluid.

Note: Maintenance shops that recycle used oil with a contractor can disregard Step 2 of Container Marking/Labeling and Handling Procedures and all the Turn-in procedures.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.** Use a non-removable head plastic or metal drum (see Table 3-4) for accumulation.
- Step 2** **Attach a Used Oil label or write “Used Oil” on the side of the container.**
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE listed on the MSDS.**
- Step 5** **Put oil in the container.**
 - Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A22 – PAINT AND PRIMER – LATEX

CHARACTERIZATION

Latex paint is normally **non-hazardous waste**.

Latex paints are also referred to as vinyl, acrylic, or water-based.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** **Select an approved container.** Use a removable head plastic or metal drum (see Table 3-4) for accumulation.
- Step 2** **Attach a Non-hazardous Waste label to the side of the container.**
- Write: Latex Paint on the Contents line.
- Step 3** **Place container in a proper accumulation area.**
- Step 4** **Wear proper PPE listed on the MSDS.**
- Step 5** **Put paint in the container.**
- Place lid back on the container securely.
- Step 6** **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** **Fill out Waste Turn-In Form AGO 200-1-14.**
- Step 2** **Make an appointment** for turn-in.
- Step 3** **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A23 – PAINT RELATED MATERIAL

CHARACTERIZATION

Unserviceable and/or expired paint is a **hazardous waste**.

EPA Hazardous Waste Numbers: **D001**

- Any additional EPA hazardous waste numbers will be dependant on MSDS or analysis - contact the supporting maintenance shop or HWM for assistance.

Paint related material refers to flammable - paints, primers, stains, thinners, strippers, and removers.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a removable head UN/NA container (see Table 3-4) for accumulation.

- When applicable keep paint in original container

Step 2 **Attach a Hazardous Waste label to the side of the container.**

- Write: Waste Paint Related Material on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE** listed on the MSDS.

Step 5 **Place paint related material in UN/NA the container.**

- Place lid back on the container securely.

Step 6 **Document** the monthly amount of waste generated in **pounds** on the "Hazardous Waste Determination Worksheet" AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Fill out Waste Turn-In Form AGO 200-1-14.**

Step 2 **Make an appointment** for turn-in.

Step 3 **E-mail** (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).

Step 4 **Bring paperwork and waste** to next level of turn-in at scheduled **appointment time and date**.

A23 – PAINT RELATED MATERIAL CONTINUED

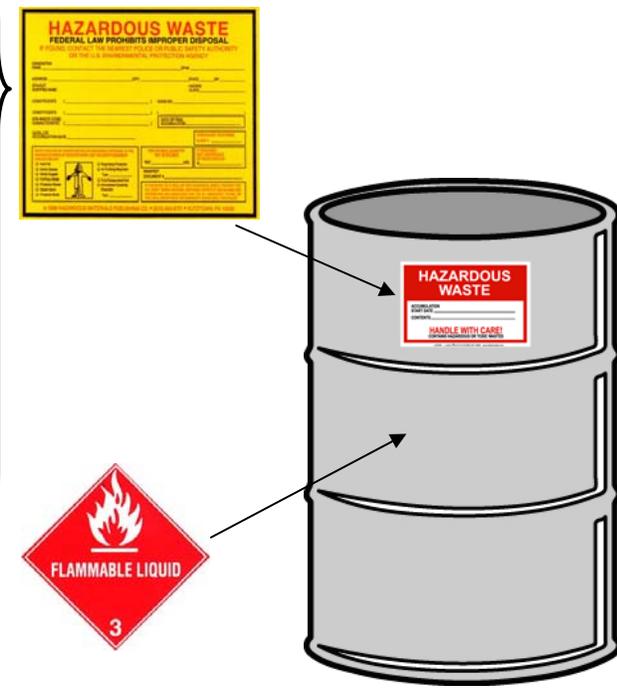
SHIPPING INFORMATION FOR SELF TRANSPORT

Paints that are flammable are a **DOT hazardous material**. For self transport over public highways take the following steps.

- Step 1** Fill out and attach the Yellow Hazardous Waste Label.
- Place directly over the Red Hazardous Waste Label.

Step 2 Attach the appropriate **DOT label** to the side of the **container** next to the hazardous waste label.

Step 3 Fill out **DD Form 836** and transport with the hazardous waste.

Generator Name and Address:	Your Information	
EPA #:	CEG	
EPA/DOT Shipping Name:	Waste Paint Related Material	
Hazard Class:	3	
PG:	II	
UN/NA No:	UN1263	
EPA Waste Code/Characteristic:	D001 at a minimum	
Accumulation Start Date:	Accumulation Start Date from Red Label	

A24 – PARTS WASHER FILTER AND SOLUTIONS

Parts Washer to include brake wash and weapon cleaning

CHARACTERIZATION

Parts washer fluids and filters **must be tested** for hazardous characteristics.

- **Coordinate with the HWM** for sampling and testing of parts washer solutions, sludges, and filters, or confirm with the HWM results from a previous test of the waste stream.

EPA Hazardous Waste Number: The hazardous waste number will be dependent on the results of analysis that is performed.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURE

Step 1 **Select an approved container.** Use a removable head UN/NA container (see Table 3-4) for accumulation.

Step 2 **Attach a Hazardous Waste label to the side of the container** (as shown in Item 1).

- Write: Parts Washer Waste on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Attach a Pending Lab Analysis label to the side of the container, or write *Awaiting Analysis*** (as shown in Item 1).

Step 4 **Place container in a proper accumulation area.**

Step 5 **Wear proper PPE** listed on the MSDS.

Step 6 **Place parts washer material in UN/NA container.**

- Place lid back on the container securely.

Step 7 **Analytical results** (shown as Item 2) The HWM will assist in properly interpreting the analysis.

Non Hazardous –

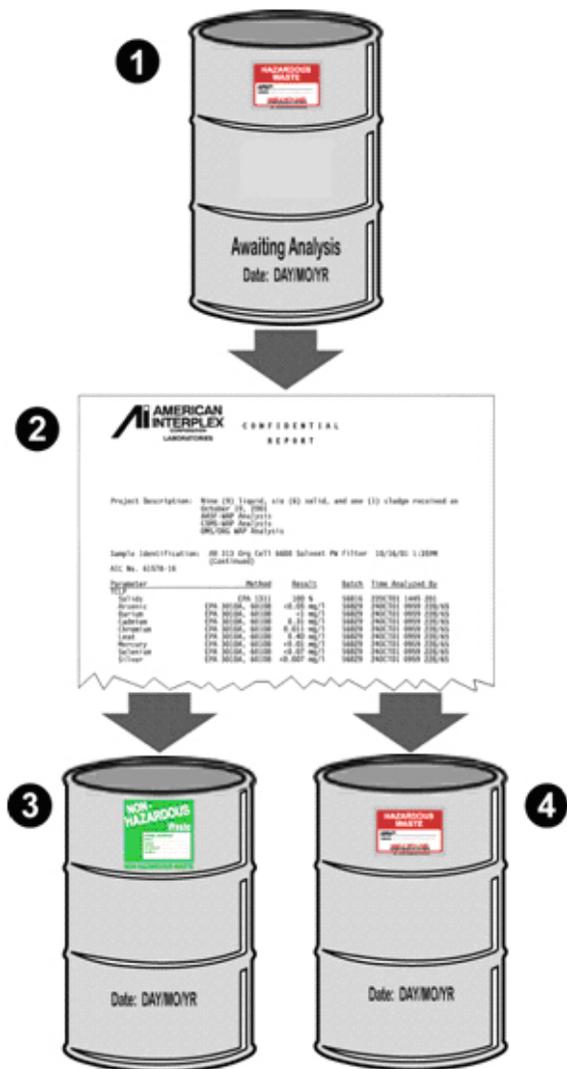
- Re-label the container as shown in Item 3.
- Remove Hazardous Waste label
- Remove Awaiting Analysis label/words

Hazardous waste

- Remove the label or words “Awaiting Analysis” (as shown in Item 4).

Step 8 **Document the Hazardous Waste Determination Worksheet” AGO Form 200-1-6.**

- Complete Columns 1-7 following analytical results
- Complete monthly amount of waste generated in **pounds** in column 8



A24 – PARTS WASHER FILTER AND SOLUTIONS CONTINUED

TURN-IN PROCEDURES

- Step 1** Fill out Waste Turn-In Form AGO 200-1-14.
- Step 2** Make an appointment for turn-in.
- Step 3** E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** Bring paperwork and waste to next level of turn-in at scheduled **appointment time and date**.

A25 – RAGS – LAUNDERED

CHARACTERIZATION

Contaminated cloth rags that are **commercially** laundered are **Non-Hazardous Waste**.

Weapon cleaning rags are covered under WPS A33.

Paper wipes, towels, and other non-laundered type rags contaminated with hazardous materials could be hazardous waste. Contact the supporting maintenance shop or HWM for assistance.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Used rags must be stored in non-leaking, closed, fire-resistant containers and kept away from sources of ignition.

Step 2 Write or stencil the words: Rags Destined for Laundry on the side of the container.

Step 3 **Place container in a proper accumulation area.**

Step 4 **Wear proper PPE** listed on the MSDS.

Step 5 **Put used rags in the container.**

- Free liquids must be removed from rags.
- Place lid back on the container securely.

Step 6 Contact the contractor to have soiled rags picked up.

Step 7 **Document** the monthly amount of waste generated in **pounds** on the "Hazardous Waste Determination Worksheet" AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 **Contact the contractor to have soiled rags picked up.**

Step 2 **Maintain invoice or contractual agreement to show on-site documentation.**

A26 – SLUDGE – CATCHBASINS, WASHRACK, OIL/WATER SEPARATOR AND SUMP WATER

CHARACTERIZATION

Sludge type waste **must be tested** for hazardous characteristics.

- **Coordinate with the HWM** for sampling and testing or confirm with the HWM results from a previous test of the waste stream.

EPA Hazardous Waste Number: The hazardous waste number will be dependent on the results of analysis that is performed.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 **Select an approved container.** Use a removable head UN/NA container (see Table 3-4) for accumulation.

Step 2 **Attach a Hazardous Waste label to the side of the container** (as shown in Item 1).

- Write: *Waste Sludge* on the Contents line.
- Fill in the ASD unless this is a SAA, then leave blank.

Step 3 **Attach an Awaiting Analysis label to the side of the container, or write *Awaiting Analysis*** (as shown in Item 1).

Step 4 **Place container in a proper accumulation area.**

Step 5 **Wear proper PPE listed on the MSDS.**

Step 6 **Place sludge in UN/NA container.**

- Place lid back on the container securely.

Step 7 **Analytical results** (shown as Item 2) The HWM will assist in properly interpreting the analysis.

Non-hazardous Waste:

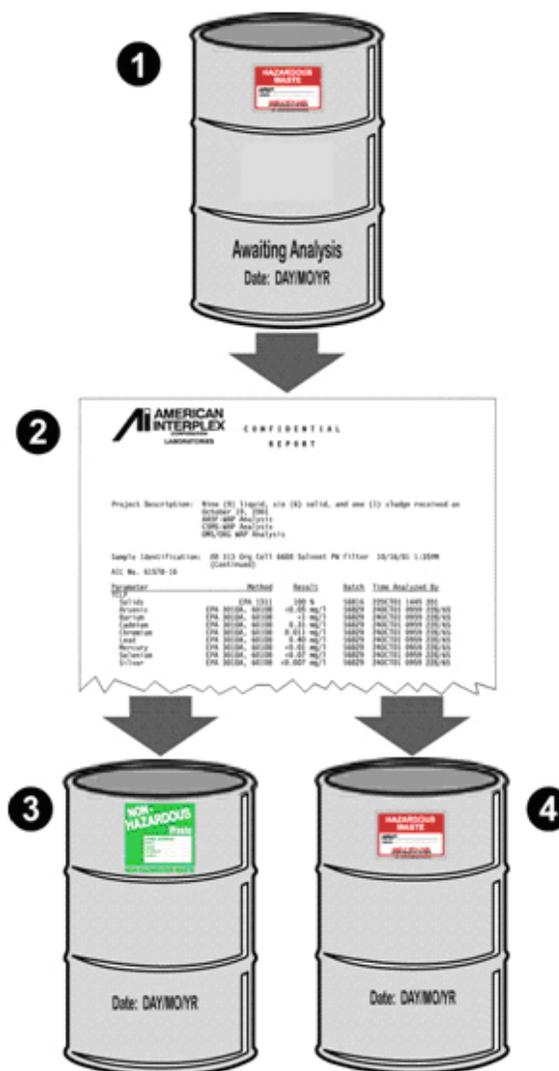
- Re-label the container as shown in Item 3.
- Remove Hazardous Waste label
- Remove Awaiting Analysis label.
- **Attach a Non-hazardous Waste label to the side of container.**
- Write: *Sludge* on the Contents line.

Hazardous Waste:

- Remove the label or words “Awaiting Analysis” (as shown in Item 4).

Step 8 **Document the “Hazardous Waste Determination Worksheet” AGO Form 200-1-6.**

- Complete Columns 1-7 following analytical results
- Complete monthly amount of waste generated in **pounds** in column 8



A26 – SLUDGE – CATCHBASINS, WASHRACK, OIL/WATER SEPARATOR AND SUMP WATER CONTINUED

TURN-IN PROCEDURES

- Step 1** Fill out Waste Turn-In Form AGO 200-1-14.
- Step 2** Make an appointment for turn-in.
- Step 3** E-mail (preferred) or fax waste turn in form and analytical report to person responsible for receiving waste (Section 4-3).
- Step 4** Bring paperwork and waste to next level of turn-in at scheduled appointment time and date.

A27 – TIRES

CHARACTERIZATION

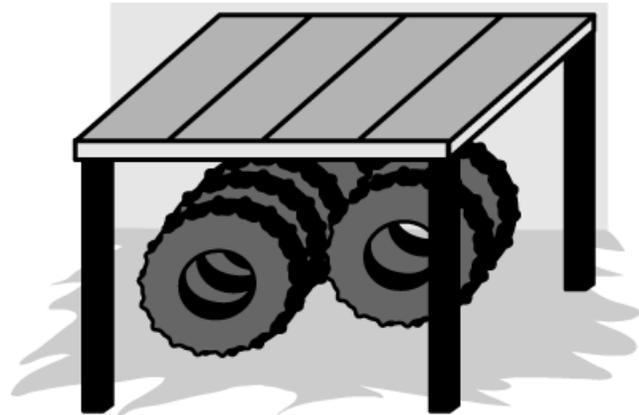
Tires are **recyclable**.

Unserviceable tires are Class IX supply and should follow the proper supply turn-in protocol.

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

Step 1 Store tires under a roof, in a trailer, or standing up and under cover to **prevent rainwater collection**.

Step 2 **Document** the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

Step 1 Maintain invoice or turn-in documentation.

A28 – WEAPON CLEANING MATERIAL – PATCHES, SWABS, AND RAGS

CHARACTERIZATION

Weapon cleaning materials are managed as hazardous waste.

EPA Hazardous Waste Number: **D008**

CONTAINER MARKING/LABELING AND HANDLING PROCEDURES

- Step 1** Select an approved container. Use a removable head UN/NA rated container (see Table 3-4) for accumulation.
- Step 2** Attach a Hazardous Waste label to the side of the container.
- Write: Waste Weapon Cleaning Material on the Contents line.
 - Fill in the ASD unless this is a SAA, then leave blank.
- Step 3** Place container in a proper accumulation area.
- Step 4** Wear proper PPE listed on the MSDS.
- Step 5** Put waste in the container.
- Place lid back on the container securely.
- Step 6** Document the monthly amount of waste generated in **pounds** on the “Hazardous Waste Determination Worksheet” AGO Form **200-1-6**.



TURN-IN PROCEDURES

- Step 1** Fill out Waste Turn-In Form AGO 200-1-14.
- Step 2** Make an appointment for turn-in.
- Step 3** E-mail (preferred) or fax waste turn in form to person responsible for receiving waste (Section 4-3).
- Step 4** Bring paperwork and waste to next level of turn-in at scheduled appointment time and date.

Appendix B Waste Protocol Sheets

Glossary

The following definitions are specific to this Plan. In some cases, these definitions may vary from those found in the regulations, as they are summarized or are a composite of definitions from different regulations.

Accumulation – The process of collecting waste in containers or tanks on site prior to shipping to a Treatment, Storage, and Disposal Facility (TSDF). Waste can be accumulated at satellite accumulation points and hazardous waste accumulation areas.

Activity – A unit or organization that performs a function or mission, or a group or facility on an installation assigned space for a common usage or function and held operationally accountable by an authority other than the Installation Commander.

Acute Hazardous Waste – The commercial hazardous chemical products, manufacturing hazardous chemical intermediates, and off-specification commercial hazardous chemical products or manufacturing hazardous chemical intermediates listed in 40 CFR 261.33(e), (P-listed Hazardous Wastes).

Accumulation Start Date (ASD) – The date when a HW first becomes subject to the accumulation time limits. This is the date the waste is first placed into a container within an HWAA or the date the 55-gallon quantity limitation is reached at a satellite accumulation point.

Best Management Practice (BMP) – Practice, operation, or procedure, which is typically not required by regulation, but comprises an alternate procedure or system that allows the user to prevent and/or reduce waste generation (i.e., pollution prevention), and ensure the safety of facility personnel working with HM or HW.

Conditionally Exempt Generator (CEG) – Sometimes referred to as Conditionally Exempt Small Quantity Generator (CESQG). Activities that follow the guidelines listed below:

- Generate no more than 100 kg/mo (220 lb/mo) of HW.
- Accumulate no more than 1,000 kg (2,200 lb) of HW on site at any one time.
- Generate less than 100 kg (220 lb) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of any acute waste release as long as no more than a total of 1 kg (2.2 lbs) of acute HW was released.
- Generate no more than 1 kg/month (2.2 lbs/month) of acute HW.

Environmental Point of Contact (EPOC) - Designated individual at a facility/unit responsible for ensuring environmental requirements are met at the facility. AR 200-1 requires unit commanders and facility managers appoint and train EPOCs at appropriate organization levels to ensure compliance actions take place.

Hazardous Chemical – Any element, hazardous chemical compound, or mixture of elements and compounds that is a physical hazard or a health hazard. Hazardous chemicals are any items requiring an MSDS, to include batteries, filters, and other solids, liquids, or gases. Chemicals with physical hazards include combustible liquids, compressed gases, explosives, flammables, organic peroxides, oxidizers, and pyrophoric chemicals that will ignite spontaneously in air, unstable chemicals, and water-reactive chemicals. Chemicals with health hazards are those for which there is significant evidence that the chemical has an acute or chronic effect on the health of exposed people. See 29 CFR 1910.1200, Appendix A and Appendix B for further definitions, explanations, and criteria for identifying hazardous chemicals.

Hazardous Material (HM) – All HMs are considered hazardous chemicals, but not all hazardous chemicals are HMs. Defined by the U.S. Department of Transportation (DOT), it is anything that due to its chemical, physical, or biological nature causes safety, public health, or environmental concerns when transported in commerce. HMs include HW and materials exhibiting explosive, flammable, corrosive, and oxidizing properties.

Hazardous Materials Information Resource System (HMIRS) – The HMIRS contains MSDSs for chemicals procured through military supply channels. The HMIRS consists of a multiple compact disc set and website at www.dlis.dla.mil/hmirs sponsored by the Defense Logistics Agency. Defense Logistics Information Service (DLIS) is the HMIRS Program Manager and acts as the focal point for Help Desk support. The DLIS Customer Contact Center Toll Free Number is 1-877-DLA-Call (352-2255), commercial (269) 961-7766 or DSN 661-

7766. Use this number to obtain a copy of the compact disc set or to obtain a registration and password to access the website.

Hazardous Waste (HW) – A solid waste is a HW if it meets the following criteria and it is not specifically excluded from regulation as a hazardous waste:

- It is specifically listed as such in 40 CFR Part 261, Subpart D.
- It is ignitable, corrosive, reactive, or toxic as measured by standard test methods or as can be reasonably determined by generators through knowledge of the waste generating process.

Hazardous Waste Accumulation Area (HWAA) – One location for activities to accumulate HW until it can be removed. Waste may be accumulated in an HWAA for no more 90 days after the ASD at LQGs or for no more than 180 days after the ASD at SQGs. Waste may be accumulated initially in an HWAA or placed in the HWAA after initial accumulation in a satellite accumulation point.

HM Employee – Personnel in the ORARNG who load, unload, or handle HMs or prepare them for shipment and/or persons responsible for HMs transportation safety or who operate a vehicle used to transport HMs.

Large Quantity Generator (LQG) – An activity that generates 2,200 pounds or more of hazardous waste in a calendar month. An LQG may accumulate hazardous waste for no more than 90 days after the ASD.

Manifest – A shipping document that must accompany HW to the TSDF.

Material Safety Data Sheet (MSDS) – A collection of information required by the OSHA Hazard Communication (HAZCOM) Standard. An MSDS includes the identity of hazardous chemicals, health and physical hazards, exposure limits, and safety precautions. Some MSDSs include storage compatibility information.

Personal Protective Equipment (PPE) – Any protective clothing or device worn by the employee to prevent contact with, and exposure to, HMs in the work area. Examples include protective aprons, goggles, face splash shields, eye protection, and various types of respiratory protection.

Pollution Prevention (P2) - Eliminating or reducing at the source the use, generation, or release of toxic pollutants. Methods of reducing pollution include, but are not limited to; process modification, inventory control measures, feedstock substitutions, various housekeeping and management practices, and improved efficiency of machinery.

Satellite Accumulation Point (SAA) – A designated point where a generator may accumulate up to 55 gallons of HW or one quart of acutely HW. Each SAA must be at or near the point of generation, and must be under the control of the operator of the process generating the waste. Once the accumulated waste at an SAA equals 55 gallons, it must be marked with the ASD and moved within 72 hours to the HWAA.

Secondary Containment (DEQ Compliant) – An engineered containment area with an impervious surface designed to contain a release of POL or HM.

Small Quantity Generator (SQG) – An activity that generates more than 220 pounds but less than 2,200 pounds of HW per month, and does not accumulate more than 2,200 pounds of HW at any one time. A SQG may accumulate HW for no more than 180 days from the ASD. SQGs located more than 200 miles from a HW TSDF may accumulate HW for no more than 270 days from the accumulation start date.

Solid Waste – All discarded materials including solids, semi-solids, sludges, liquids, and compressed gases are solid wastes unless excluded by regulation. A discarded material is any material that is abandoned, recycled, or considered inherently waste-like.

Source reduction - Any practice which reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal. The term includes equipment or technology modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

Spill – The accidental leaking, pumping, emitting, discharging, emptying, or dumping of waste or materials to the environment (air, water, or soil).

Transfer – The physical movement of waste from one activity or point to another, such as from an SAA to a HWAA or off site to a TSDF.

Universal Waste (UW) – Defined in 40 CFR Part 273, universal wastes include certain batteries, pesticides, mercury containing items such as thermostats, and lamps.

Used Oil – Any oil that has been refined from crude oil or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. This includes, but is not limited to, fuel oils, motor oils, gear oils, cutting oils, transmission fluids, and hydraulic fluids. For the purposes of this Plan, used oil does not include transformer oil or other dielectric fluids.

Waste Stream - The waste output of a process, area, location, or facility. Can include hazardous and non-hazardous waste in solid, liquid or gaseous form. Used primarily in this Plan to describe a specific hazardous or non-hazardous waste generated by a common ORARNG process.

Acronyms

AASF	Army Aviation Support Facility
ACM	Asbestos Containing Material(s)
AEDA	Ammunition, Explosives, and Dangerous Articles
AGI-ENV	Adjutant General Installations - Environmental
AOSC	Alternate On-Scene Coordinator
AR	Army or Army Regulation
ASD	Accumulation Start Date
AUL	Authorized User List
BMP	Best Management Practice
CAGE	Manufacturer's Code
CEG	Conditionally Exempt Generator
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CoS	Chief of Staff
CY	Calendar Year
DA	Department of the Army
DA PAM	Department of the Army Pamphlet
DCSOPS	Director of Plans, Operations, and Training
DEQ	Oregon Department of Environmental Quality
DLA	Defense Logistics Agency
DLIS	Defense Logistics Information Service
DoD	Department of Defense
DOT	Department of Transportation
DRMO	Defense Reutilization and Marketing Office
DTR	Defense Transportation Regulations
ECN	Environmental Compliance Notebook
ECP	Explosive Contaminated Property
EMD	Emergency Management Division
EPA	United States Environmental Protection Agency
EPM	Environmental Program Manager
EPOC	Environmental Point(s) of Contact
ERG	Emergency Response Guidebook
FEDLOG	Federal Logistics Data System
FEPOC	Facility Environmental Point of Contact
FMS	Field Maintenance Shop
FMSS	Field Maintenance Sub Shop
FSRP	Facility Spill Response Plan

GAA	Grease, Automotive, and Artillery
GSA	General Services Administration
HAZCOM	Hazard Communication
HCC	Hazard Characteristic Code
HEPA	High Efficiency Particle Air
HID	High Intensity Discharge
HM	Hazardous Material
HMWSMP	Hazardous Material, Waste, and Spill Management Plan
HMIRS	Hazardous Materials Information Resource System
HSAC	Hazard Storage Area Code
HSWA	Hazardous and Solid Waste Amendments
HW	Hazardous Waste
HWAA	Hazardous Waste Accumulation Area
HWDW	Hazardous Waste Determination Worksheet
HWM	Hazardous Waste Manager
IAW	In Accordance With
ICP	Integrated Contingency Plan
IMPAC	International Merchant Purchase Authorization Card
IOSC	Installation On-Scene Coordinator
ISCP	Installation Spill Contingency Plan
lbs	Pounds
LDR	Land Disposal Restriction
LPL	Local Purchase List
LQG	Large Quantity Generator
LQHUW	Large Quantity Handler of UW
MEK	Methyl Ethyl Ketone
MFR	Memorandum for Record
MQCSS	Material Quality Control Storage Standard
MSDS	Material Safety Data Sheet(s)
NA	Not Available
NFPA	National Fire Protection Association
NGB	National Guard Bureau
NGB-ARE	National Guard Bureau – Environmental Division
NCOIC	Non-Commissioned Officer-in-Charge
Ni-Cd	Nickel-Cadmium
NRC	National Regulatory Commission
NSN	National Stock Number
OAR	Oregon Administrative Rules
OERS	Oregon Emergency Response System

OIC	Officer-in-Charge
OMD	Oregon Military Department
ORANG	Oregon Air National Guard
ORARNG	Oregon Army National Guard
ORARNGR	Oregon Army National Guard Regulation
ORS	Oregon Revised Statutes
OSHA	Occupational Safety and Health Administration
OSMS	Oregon Sustainment Maintenance Site
OWS	Oil/Water Separator
P2	Pollution Prevention
Pam	Pamphlet
PAO	Public Affairs Office
PCB	Polychlorinated Biphenyl
Plan	ORARNG Hazardous Material, Waste, and Spill Management Plan
POC	Point of Contact
POL	Petroleum, Oil, and Lubricant
PPE	Personal Protective Equipment
ppm	Parts per Million
QSL	Quality Status List
RCAS	Reserve Component Automated System
RCRA	Resource Conservation and Recovery Act
SAA	Satellite Accumulation Area
SAO-S	State Aviation Officer - Safety
SDC	Supply Distribution Center
SLC	Shelf-life Code
SLN	Shelf Location Number
SMW	State Maintenance Worker
SOP	Standard Operating Procedure
SPCC	Spill Prevention Control and Countermeasures
SQG	Small Quantity Generator
SQHUW	Small Quantity Handler of UW
TSCA	Toxic Substance Control Act
TSDF	Treatment, Storage, and Disposal Facility
U.S.	United States
UN	United Nations
USAR	U.S. Army Reserve
USPFO	U.S. Property and Fiscal Office(r)
UTES	Unit Training Equipment Site
UW	Universal Waste

WPS

Waste Protocol Sheet