

Volume 1

Waste Management Plan and Standard Operating Procedures



Prepared for:

**Camp Stanley Storage Activity
Boerne, Texas**

September 2010

EXECUTIVE SUMMARY

This waste management plan (WMP) is for use and implementation at Camp Stanley Storage Activity (CSSA) located in Bexar County, Texas. CSSA is a Department of Defense (DoD) facility located approximately 19 miles northwest of downtown San Antonio in south central Texas, covering a total area of 4,004.18 acres. This plan describes the procedures, policies, and responsibilities for hazardous waste (HW) management activities such as waste identification, handling, and storage tasks performed at the installation. This plan is designed to ensure that the HW tasks performed at the installation comply with the applicable federal, state, local, and army regulations (AR).

This plan will be used by all personnel at CSSA involved in the management of wastes containing hazardous constituents. The plan establishes specific procedures to be followed while performing waste management activities such as waste generation, classification, containerizing and packaging, labeling, accumulation, transportation, and disposal.

This document contains two volumes. Volume One is divided into eight sections and one appendix. Section 1 is an introductory section, a brief summary of most significant waste streams generated at the facility is included in Section 2, and the regulatory backgrounds for the waste management activities is provided in Section 3. Section 4 describes various waste management tasks and identifies responsible personnel for implementing the waste management tasks. Spill prevention and response activities are described in Section 5. The pollution prevention program at the installation is described in Section 6. Section 7 details the personnel training programs as required for the waste management activities. The recordkeeping and reporting requirements for waste management activities at the post are described in Section 8. The appendix to volume one includes the standard operating procedures (SOPs) for managing all waste streams generated at CSSA. Volume Two contains the individual WMPs for all CSSA shops that generate waste. Each shop-specific WMP has attached only those SOPs that apply to the wastes generated at that shop.

This plan should be considered as an overview of HW management procedures and requirements. Applicable regulations should be reviewed periodically and this plan updated to ensure that the complete and most current listings of HW management requirements are incorporated.

CONTENTS

	<u>Page</u>
ACRONYMS AND ABBREVIATIONS	III
ACRONYMS AND ABBREVIATIONS, continued	IV
SECTION 1 INTRODUCTION	1-1
1.1 Purpose	1-1
1.2 General Installation Information	1-1
1.3 Hazardous Waste Activities	1-2
1.4 General Plan Overview	1-2
SECTION 2 WASTE GENERATION ACTIVITIES	2-1
2.1 Ordnance Maintenance Branch	2-1
2.2 Public Works Branch	2-2
2.3 Transportation branch	2-2
2.4 Stockpile Reliability Branch	2-3
2.5 Special Equipment Branch	2-3
2.6 Munitions Storage and Maintenance Branch	2-3
2.7 Joint Combat Systems Research Team	2-3
2.8 Miscellaneous Activities	2-3
2.8.1 Installation Wastewater	2-4
2.8.2 Spill Residues	2-4
2.8.3 Investigation-Derived Wastes	2-4
2.8.4 Remediation Waste.....	2-4
SECTION 3 REGULATORY OVERVIEW	3-1
3.1 Waste Classification	3-2
3.1.1 Hazardous Wastes	3-2
3.1.2 Non-hazardous Wastes	3-3
3.2 Waste Accumulation and Storage	3-3
3.3 Onsite Waste Transfers	3-4
3.4 Waste Treatment and Disposal	3-4
3.5 Offsite Waste Transportation	3-4
3.6 Spills and Releases	3-5
SECTION 4 WASTE MANAGEMENT TASKS	4-1
4.1 Waste Identification	4-1

4.2 Waste Accumulation.....	4-1
4.3 Waste Labeling.....	4-6
4.4 Onsite Waste Transfers.....	4-6
4.5 Waste Storage.....	4-7
4.6 Offsite Waste Transportation.....	4-7
4.7 Environmental Management System Documentation and Document Control.....	4-7
SECTION 5 SPILL PREVENTION, REPORTING AND RESPONSE	5-1
SECTION 6 POLLUTION PREVENTION PROGRAM.....	6-1
SECTION 7 PERSONNEL TRAINING.....	7-1
7.1 Program Overview.....	7-1
7.2 Recordkeeping.....	7-1
SECTION 8 RECORDKEEPING AND REPORTING	8-1
8.1 Recordkeeping.....	8-1
8.1.1 Waste Generation	8-1
8.1.2 Waste Storage.....	8-1
8.1.3 Spills and Releases	8-2
8.2 Reporting.....	8-2

APPENDICES

A - Waste Management Standard Operating Procedures

FIGURES

2.1 - Summary of Shop Waste Streams at CSSA

TABLES

4.1 - List of Example Incompatible Wastes

ACRONYMS AND ABBREVIATIONS

AR	Army Regulation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CLP	Cleaner-lubricant-protector
CSSA	Camp Stanley Storage Activity
CWA	Clean Water Act
DoD	Department of Defense
DOT	Department of Transportation
DRMO	Defense Reutilization and Marketing Organization
EPA	Environmental Protection Agency
FWPCA	Federal Water Pollution Control Act
HW	hazardous waste
IAW	in accordance with
IDW	investigation-derived wastes
ISCP	Installation Spill Contingency Plan
MCAAP	McAlester Army Ammunition Plant
MSW	municipal solid waste
NOR	Notice of Registration
OMB	Ordnance Maintenance Branch
PPE	personal protective equipment
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SARA	Superfund Amendment and Reauthorization Act
SH	State Highway
SOP	standard operating procedure
SPCCP	Spill prevention, control, and countermeasures plan
STEERS	State of Texas Environmental Electronic Reporting System
TAC	Texas Administrative Code

ACRONYMS AND ABBREVIATIONS, continued

TCEQ	Texas Commission on Environmental Quality
TCLP	toxicity characteristic leaching procedure
TNRCC	Texas Natural Resource and Conservation Commission
TPDES	Texas Pollution Discharge Elimination System
TSD	treatment, storage, and disposal
USDA	United States Department of Agriculture
VCI	volatile corrosion inhibitor
WMP	Waste Management Plan
WRPA	Waste Reduction Policy Act
WWTP	wastewater treatment plant

SECTION 1 INTRODUCTION

1.1 PURPOSE

This waste management plan (WMP) is prepared for the use and implementation at Camp Stanley Storage Activity (CSSA) located in Bexar County, Texas. CSSA is a Department of Defense (DoD) facility. This plan describes the procedures, policies, and responsibilities for hazardous waste (HW) management activities such as waste identification, handling, and storage tasks performed at the installation. This plan is designed to ensure that the HW tasks performed at the installation comply with the applicable federal, state, local, and army regulations (AR).

This plan will be used by all personnel at CSSA involved in the management of wastes containing hazardous constituents. The plan establishes specific procedures to be followed while performing waste management activities such as waste generation, classification, containerizing and packaging, labeling, accumulation, transportation, and disposal.

This plan should be considered as an overview of HW management procedures and requirements. Applicable regulations should be reviewed periodically and this plan updated to ensure that the complete and most current listings of HW management requirements are incorporated.

1.2 GENERAL INSTALLATION INFORMATION

CSSA is located approximately 19 miles northwest of downtown San Antonio in south central Texas, and has a total area of 4,004.18 acres. CSSA is immediately east of State Highway (SH) 3351 (Ralph Fair Road), approximately 0.5 mile from Interstate Highway 10. CSSA has an approximate workforce of 115 and is a sub-installation of McAlester Army Ammunition Plant (MCAAP).

CSSA is a restricted-access installation due to its explosive ordnance storage and testing missions with inner cantonment lands to the southwest and outer cantonment areas to the east and north. Operational buildings and igloo storage magazines are located within the inner cantonment.

The eastern boundary of CSSA and part of its northern and southern boundaries are contiguous with the Camp Bullis Military Training Reservation, Fort Sam Houston. The surrounding area to the west, northwest, and southwest is a growing residential community.

The primary mission of CSSA is the receipt, storage, issue, and maintenance of ordnance materiel, as well as quality assurance testing and maintenance of military weapons and ammunition¹.

The name and address of the owner and operator of the installation are:

¹ Environmental Health Engineering Department, Fifth US Army Medical Laboratory, Report of Engineering-Survey-Industrial Waste and Wastewater Treatment Plant, CSSA, Texas, October, 1971.

Installation Manager
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, Texas 78015-4800
Phone: (210) 295-7416

The designated person in charge of oil and hazardous substances and related issues at the installation is the Environmental Program Manager, Phone: (210) 295-7453 and/or (210) 698-5208.

1.3 HAZARDOUS WASTE ACTIVITIES

The CSSA installation is classified as a non-industrial, conditionally exempt small quantity generator (CESQG) (Environmental Protection Agency [EPA] Identification Number TX2210020139) of HW as defined by 30 TAC 335.78. In addition, the facility also generates and stores hazardous and non-hazardous (non-hazardous) municipal wastes under Texas Solid Waste Registration Number 69026. CSSA will follow to this WMP as a best management practice. As a CESQG, CSSA is not required to strictly adhere to this plan unless hazardous waste is generated in a calendar month in quantities greater than those specified by 30 TAC 335.7 resulting in CSSA's status changing to a small or large quantity generator.

In addition to the wastes generated directly from primary mission activities, some waste streams are also generated from post support activities. The specific activities generating hazardous and non-hazardous wastes are discussed in detail in Section 2 and the specific regulations pertaining to CESQGs are discussed in Section 3.

1.4 GENERAL PLAN OVERVIEW

This document contains two volumes. Volume one is divided into eight sections and one appendix, including this introductory section. Section 2 presents a brief summary of most significant waste streams generated at the facility. The regulatory backgrounds for the waste management activities are detailed in Section 3. Section 4 describes various waste management tasks and identifies responsible personnel for implementing the waste management tasks. Section 4 draws on many appendices to describe detailed step-by-step waste management procedures. Spill prevention and response activities are described in Section 5. The pollution prevention program at the installation is described in Section 6. Section 7 details the personnel training programs as required for the waste management activities. The recordkeeping and reporting requirements for waste management activities at the post are described in Section 8. The appendix to volume one includes the standard operating procedures (SOPs) for all managing all waste streams generated at CSSA. Volume two contains the individual WMPs for all CSSA shops that generate waste. Each shop-specific WMP has attached only those SOPs that apply to the wastes generated at that shop.

Any and all revisions to this plan will be made by replacing the old affected pages with the new ones and documenting the revisions on a Record of Revisions page presented in front of this document (page *ii*).

SECTION 2

WASTE GENERATION ACTIVITIES

CSSA is classified as a CESQG (30 Texas Administrative Code [TAC] 335.1, 30 TAC 335.78, and 335.471). CSSA is a non-industrial waste generator² which generates hazardous and non-hazardous municipal wastes from various activities associated with the primary mission at the installation.

In addition to the wastes generated directly from the primary mission activities, some waste streams are also generated from miscellaneous post support activities. A Parsons team reviewed processes at CSSA for waste minimization opportunities. Through waste minimization efforts CSSA has reduced their routinely generated hazardous waste to zero pounds per year. Only hazardous waste generated from non-routine operations are managed on-post. The specific activities generating hazardous and non-hazardous wastes are discussed below, and a visual road map of all waste streams at CSSA is included as Figure 2.1.

2.1 ORDNANCE MAINTENANCE BRANCH

The Ordnance Maintenance Branch (OMB) is one of the largest operations at CSSA and consequently generates the largest volume of routine non-hazardous municipal waste. This branch is responsible for small arms refurbishing and maintenance operations including degreasing and packaging of weapons. In addition to these activities, the branch operates a small indoor firing range.

Small arms come into the facility and are unpacked. Depending on the condition of the weapons, they are either cleaned in dip tanks using a solvent (mineral spirits) or a closed-loop parts cleaner using Citrisolve™ or Safety-Kleen Gold™ solvent, a less toxic alternative to standard solvents. After reworking, they are washed; test fired, and cleaned with cleaner-lubricant-protector (CLP), bore cleaner, or other non-hazardous solvents. The arms are then processed through a series of dip tanks, which consist of a solvent rinse and volatile corrosion inhibitor (VCI), and finally packaged for storage or shipment.

The indoor firing range is used to test-fire weapons as part of the refurbishing process. The commercial range now used to test weapons incorporates a lead capture and air filtration system. The recovered lead from the indoor firing range(s) are recycled at authorized off-post recycling facilities³.

Currently, OMB recycles spent petroleum solvents using three Safety-Kleen Model 250 Recycle Machines. Machine maintenance is performed by Safety-Kleen personnel. In addition to the materials routinely used for the maintenance of weapons, this branch also uses a variety of paints for general use purposes. The wastes generated from this branch may include used paint containers, empty product containers, lead or copper projectiles and filters, small arms ammo casings (steel and brass), gun cleaning patches, used oil, Safety-Kleen or citrus-based solvent

² CSSA, 1998. Correspondence dated December 11, 1998 from the Texas Natural Resource Conservation Commission (TNRCC), currently known as the Texas Commission on Environmental Quality (TCEQ).

³ CSSA, 2006. Correspondence dated January 24, 2006 from the Texas Commission on Environmental Quality (TCEQ) regarding classification of lead contaminated filters generated at CSSA's testing facilities.

sludges, recyclable materials, empty containers, and other non-hazardous municipal solid waste (MSW) including personal protective equipment (PPE). Soiled red rags are collected in designated metal bins and laundered offsite by a contractor. A WMP for waste streams generated by OMB is included in Volume 2.

2.2 PUBLIC WORKS BRANCH

This branch is responsible for general maintenance, light construction, and repair at CSSA. They maintain an onsite laboratory to test drinking water and sewage effluent. A variety of small quantities of chemicals are maintained in the Building 73 Water Laboratory, Building 30 (Pest Management), Building 38 (Tractor Operations, Plumbing, and HVAC), Building 608 (Electrical), Building 601 (Box Shop), and the wastewater treatment plant (WWTP).

The waste materials generated as part of public work branch operations consist primarily of empty containers from the materials used including herbicide, pesticide, and aerosol paint containers. The aerosol paint containers are punctured and drained at the HAZMART prior to recycling or disposal offsite. Volume 2 contains WMPs for all Shops that are part of the Public Works Branch.

2.3 TRANSPORTATION BRANCH

This branch includes the Motor Pool (Building 4), the HAZMART (Building 93), and the Recycling Collection Center (Building 302). WMPs for these shops are included in Volume 2.

CSSA utilizes a fleet of cars and trucks on-post which are leased from the US. General Services Administration (GSA) and/or owned by CSSA. These vehicles are maintained and serviced by commercial facilities off-post. CSSA's motor pool provide maintenance and service to CSSA owned heavy equipment, tractors, forklifts and other light machinery. The Motor Pool generates used absorbent, oil, gas, hydraulic fluid, fuel filters, oil, oily rags, and anti-freeze. These materials are stored in separate barrels in a storage container outside Building 4 and are recycled or managed offsite by a licensed contractor.

The HAZMART at Building 93 provides a single point of control and management, accountability and tracking of the distribution and use of all hazardous materials brought on-post. Daily functions of the HAZMART include: receiving, storing, and repackaging hazardous materials; regulating the distribution of hazardous materials to other on-post Shops; reusing or recycling materials returned to the HAZMART; and managing hazardous and non-hazardous wastes generated by materials that cannot be reused or recycled. The HAZMART uses the Hazardous Inventory Tracking System (HITS) to regulate the distribution of hazardous materials on-post. The objectives of HITS are to provide real-time chemical inventory information to users, to allow HAZMART personnel to access relevant chemical safety information, and to facilitate efficient and compliant disposal of chemical waste.

The Recycling Collection Center at Bldg 302 serves as the central collection and sorting point for all recyclable materials at CSSA (with the exception of used oil, fuel, antifreeze, and fluorescent bulbs). A list of recyclable materials that are collected at the Collection Center is included in the attached SOP-006: Recycling. CSSA personnel transport segregated recyclable items from the Collection Center to a processing facility located at Lackland Air Force Base, San Antonio, TX.

2.4 STOCKPILE RELIABILITY BRANCH

This branch is responsible for quality assurance of ammunition and includes the Shop at Building 44 and the adjacent Quick Range. Selected samples of ammunition lots are destructively tested to assess the quality of the batch. There is a large range where munitions are test fired. This is an active range area and the spent projectiles are routinely removed from the area and recycled.

The wastes generated from this branch may include used spray paint cans, empty product containers, lead or copper projectiles and filters, small arms ammo casings (steel and brass), gun cleaning patches, used oil, recyclable materials, and other non-hazardous municipal solid waste (MSW) including PPE. Soiled red rags are collected in designated metal bins and laundered offsite by a contractor. Volume 2 contains a WMP for Building 44 and the Quick Range.

2.5 SPECIAL EQUIPMENT BRANCH

This branch operates in Building 91N and is responsible for special projects on an as-needed basis. The wastes generated from this branch may include empty containers, universal waste, recyclable materials, and other non-hazardous municipal solid waste (MSW). Soiled red rags are collected in designated metal bins and laundered offsite by a contractor. A WMP for the waste streams generated by SEB is included in Volume 2.

2.6 MUNITIONS STORAGE AND MAINTENANCE BRANCH

This branch has operations at Buildings 45 and 200, including a paint shop in Building 200 for painting ammunition boxes and other small parts. A spray booth is used in addition to small hand painting jobs using spray paint. The wastes generated from this branch may include used spray paint cans, filters from the spray paint booth, empty product containers, small arms ammo casings (steel and brass), gun cleaning patches, recyclable materials, and other non-hazardous municipal solid waste (MSW) including PPE. Soiled red rags are collected in designated metal bins and laundered offsite by a contractor. Volume 2 contains a WMP for the Shops at Building 45 and 200.

2.7 JOINT COMBAT SYSTEMS RESEARCH TEAM

This branch includes the East Pasture Range Classroom and Small Arms Range. The East Pasture range area is used for training and practice shooting. This is an active range area and the spent projectiles are routinely removed from the area and recycled.

The wastes generated from this branch may include empty product containers, lead or copper projectiles and filters, small arms ammo casings (steel and brass), gun cleaning patches, used oil, Saftey-Kleen or citrus-based solvent sludges, recyclable materials, and other non-hazardous municipal solid waste (MSW) including PPE. Soiled red rags are collected in designated metal bins and laundered offsite by a contractor. The WMP for the East Pasture Range and Classroom is included in Volume 2.

2.8 MISCELLANEOUS ACTIVITIES

Miscellaneous activities and support services at the installation generate various potentially hazardous and non-hazardous special waste streams. These waste streams include sewage, spill

residues, environmental investigation-derived wastes (IDWs), and remediation waste. These waste streams are discussed in detail below.

2.8.1 Installation Wastewater

Wastewaters are generated at the installation from sanitary wastes, car wash, and other miscellaneous water uses. The wastewater is treated in the installation WWTP before the treated effluent is discharged to an off post creek. The TCEQ permit number is WQ0003849-000

The wastewater sludge resulting from the treatment process is dried in sludge drying beds and transported and disposed of offsite by a licensed contractor.

Contaminated waters generated from environmental activities are currently managed at CSSA's TPDES Outfall 002, which consist of a granulated activated carbon (GAC) unit to treat volatile organic compounds. CSSA's Outfall 002 is located at the north edge of the CSSA Inner Cantonment adjacent to a North Outer Drive culvert, between Butler Road and Moyer Road.

2.8.2 Spill Residues

Spill residues include media contaminated with spilled hazardous materials, and debris generated from spill containment and cleanup activities. Spill residues typically involve petroleum substance contaminated media, but may include media contaminated with any of the numerous hazardous substances used on the installation.

Contaminated soil may be generated due to spills of petroleum substances or hazardous substances. These soils may be hazardous or non-hazardous depending on the type and magnitude of spill. These soils are characterized for waste classification and managed as required by their classification. In addition, absorbents and booms may be used to contain and clean up spills. These spill residues are also characterized for waste classification and managed accordingly.

2.8.3 Investigation-Derived Wastes

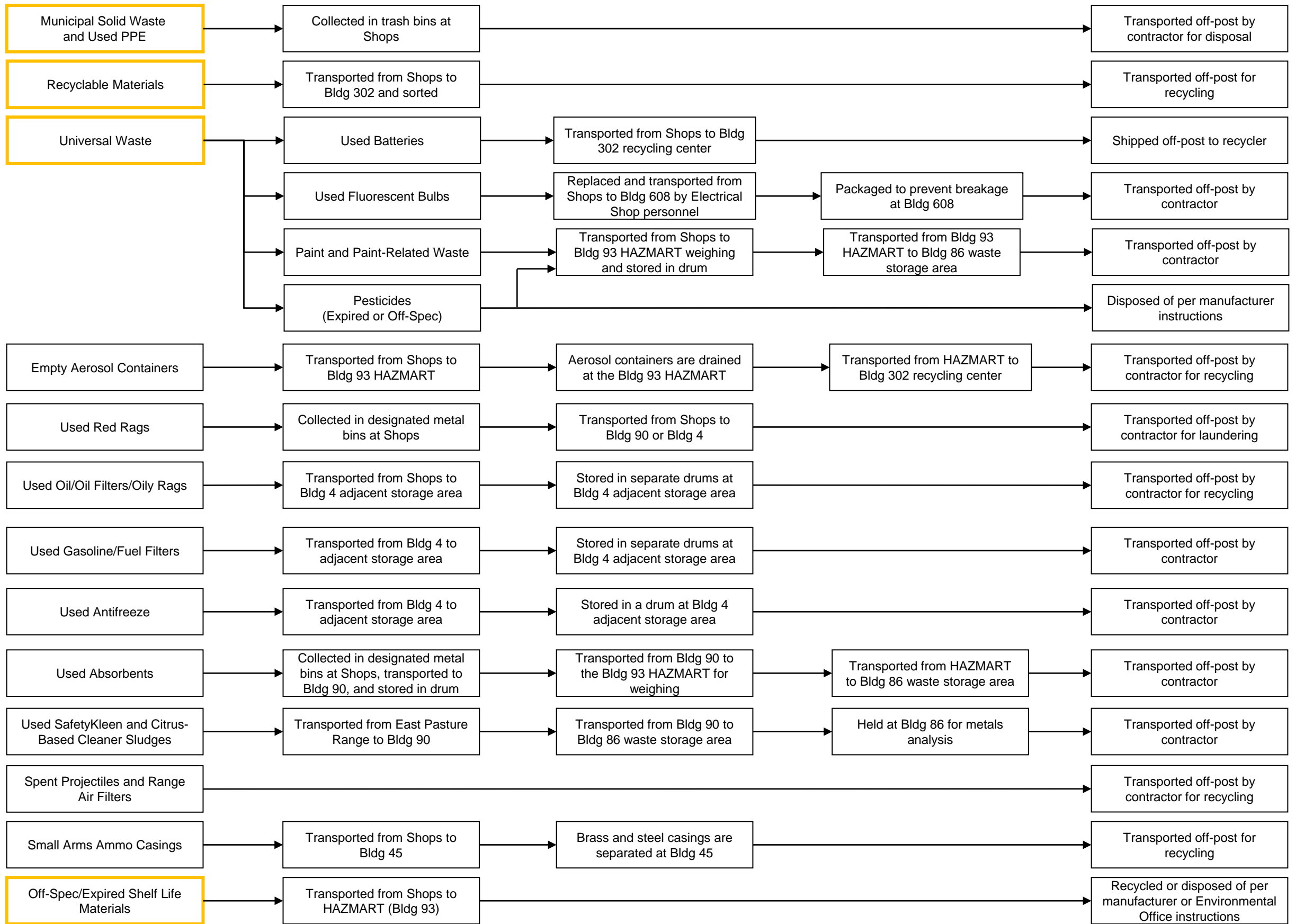
Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) activities at the installation may result in wastes such as soil boring cuttings, general investigation trash, decontamination wastes, and water. These wastes are classified as hazardous, or non-hazardous special waste (Class 1 non-hazardous or Class 2 non-hazardous like solid wastes). CSSA's RFI and Interim Measures Waste Management Plan⁴ sets forth detailed waste management procedures for IDW and remediation wastes at Camp Stanley and are hereby incorporated by reference. Contaminated groundwater is treated through the GAC unit and released through Outfall 002 in accordance with CSSA's TPDES Permit.

2.8.4 Remediation Waste

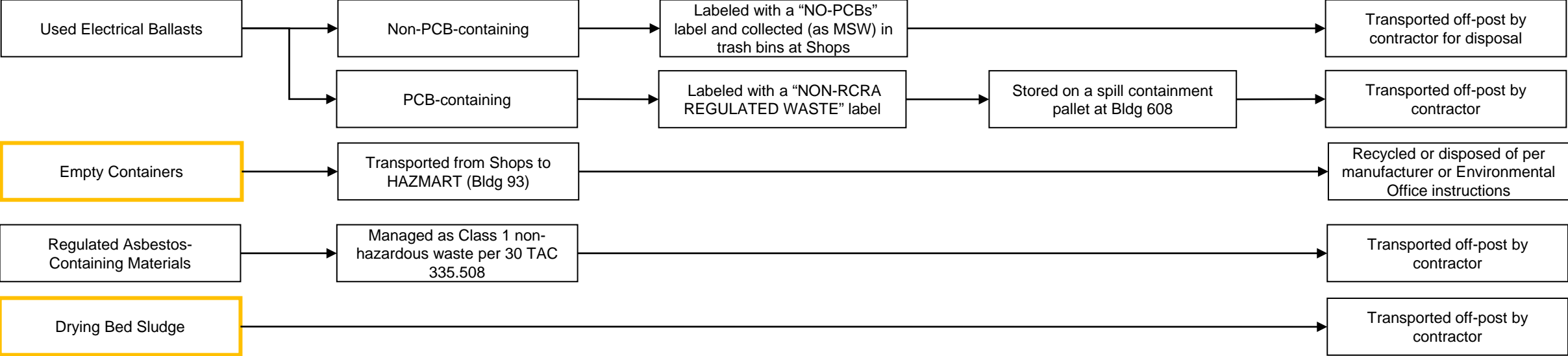
Cleanup of old Post disposal pits and other contaminated sites often require excavation and offsite disposal of contaminated soil, trash, and other debris. The May 2006 RFI and Interim Measures Waste Management Plan⁴ sets forth detailed waste management procedures for remediation waste at Camp Stanley and is hereby incorporated by reference.

⁴ Parsons, 2006. *RFI/Interim Measures Waste Management Plan*, May 2006

FIGURE 2.1 - SUMMARY OF SHOP WASTE STREAMS AT CSSA



**FIGURE 2.1 - SUMMARY OF SHOP WASTE STREAMS AT CSSA
(Continued)**



FLOWCHART LEGEND

CSSA Waste Stream

WWTP/Water Lab Waste Stream

SECTION 3 REGULATORY OVERVIEW

Various federal, state, and local regulations govern waste management activities. This section presents a brief introduction to these regulations related to the waste management activities. These regulations may be broadly classified as those pertaining to waste classification, accumulation and treatment, storage, and disposal (TSD), transportation, and spills and releases. In addition, certain documenting and reporting is required for each of these waste management activities. Furthermore, regulations also establish required worker training, and work place health and safety conditions for activities involving hazardous constituents.

This regulatory overview is for reference and general information purposes only, and should not be considered a complete listing of all applicable regulatory requirements. The most current and applicable regulations should be referenced for determining regulatory requirements associated with waste management activities. Specific regulatory citations should be reviewed to determine applicability to specific situations.

CSSA is classified as a non-industrial, CESQG and is exempt from many of RCRA and state requirements for management of hazardous waste. Under 30 TAC 335.78, a generator is a CESQG in a calendar month if no more than 100 kilograms of hazardous waste are generated in that month.

Per 30 TAC 335.78(b):

“A CESQG is exempt from most hazardous waste storage and handling requirements -- exempt from regulation under Subchapters C - H and O of chapter 335 (relating to Standards Applicable to Generators of Hazardous Waste; Standards Applicable to Transporters of Hazardous Waste; Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities; Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities; Location Standards for Hazardous Waste Storage, Processing, or Disposal; Standards for the Management of Specific Wastes and Specific Types of Facilities; and Land Disposal Restrictions); Chapter 1 of this title (relating to Purpose of Rules, General Provisions); Chapter 3 of this title (relating to Definitions); Chapter 10 of this title (relating to Commission Meetings); Chapter 20 of this title (relating to Rulemaking); Chapter 37 of this title (relating to Financial Assurance); Chapter 39 of this title (relating to Public Notice); Chapter 40 of this title (relating to Alternative Dispute Resolution); Chapter 50 of this title (relating to Actions on Applications); Chapter 55 of this title (relating to Request for Contested Case Hearings); Chapter 70 of this title (relating to Enforcement); Chapter 80 of this title (relating to Contested Case Hearings); Chapter 86 of this title (relating to Special Provisions for Contested Case Hearings); Chapter 261 of this title (relating to Introductory Provisions); Chapter 277 of this title (relating to Use Determinations for Tax Exemption for Pollution Control Property); Chapter 305 of this title (relating to Consolidated Permits); or the notification requirements of

the Resource Conservation and Recovery Act, §3010, provided the generator complies with the requirements of subsections (f), (g), and (j) of this section.”

Although CSSA is exempt, it will strive to follow most of the RCRA and state hazardous waste requirements as good management practices.

3.1 WASTE CLASSIFICATION

Industrial-type wastes may be generated as spent materials, process residues, discarded materials, and residues from spills and releases. A waste once generated may be broadly classified as a hazardous or a non-hazardous solid waste. Management of HWs is governed mostly by the regulations under RCRA and its associated state regulations, and management of industrial non-hazardous wastes are governed by state regulations. Under the authority of the EPA, the TCEQ administers the RCRA program for the State of Texas. In addition to hazardous and non-hazardous solid wastes, wastes such as wastewater and storm water may be generated, which are regulated under Clean Water Act (CWA) and Texas Pollution Discharge Elimination System (TPDES).

CSSA is classified as a non-industrial facility and therefore does not generate industrial solid wastes. However, classification of CSSA hazardous municipal and industrial like non-hazardous special waste are performed in accordance with state regulations in 30 TAC §335, Subchapter R. The waste classification regulations are further discussed below.

3.1.1 Hazardous Wastes

Hazardous wastes are identified and classified in Title 40 Code of Federal Regulations (CFR) Parts 260 and 261. The State of Texas has adopted these rules by reference in 30 TAC Section §335.504.

For any waste to be a HW, first it must be a solid waste as defined in 40 CFR Part 261.2. Specific wastes such as wastewater, mining wastes, and oil and gas exploration wastes are excluded from the HW regulations. These exclusions are listed under 40 CFR Part 261.4. In addition, some wastes, which are reused or recycled, (40 CFR 261.2 and 261.3) are exempt from all or portions of HW regulations.

Primary classification of HWs is by listing and by characteristics. HW includes wastes generated from nonspecific sources, specific sources or processes, and from spills of hazardous chemicals. HWs listed for nonspecific source uses are assigned an "F" waste code, and include waste codes from F001 through F039 (40 CFR 261.31). The HWs listed for specific sources or uses are assigned "K" waste codes, and include waste codes from K001 through K178 and K181 (40 CFR 261.32). Spill residues of hazardous chemicals are classified as "P" waste codes for acute hazardous chemicals [P001 through P205, 40 CFR 261.33 (e)], and as "U" waste codes for nonacute hazardous chemicals [U001 through U411, 40 CFR 261.33 (f)]. In addition to these listed HWs, mixtures of listed HW(s) and solid wastes or other materials may also be classified as listed wastes. The waste codes of such waste mixtures will be based on the listed wastes present in the mixture.

Regardless of whether a solid waste is a listed HW or not, it may be classified as HW based on certain waste characteristics. These characteristics include ignitability, corrosivity, reactivity, and toxicity. The toxicity characteristics are based on the presence of specific chemical constituents above the chemical-specific concentration limits in the liquid fraction or the

leachate of a solid waste using a standard test method such as toxicity characteristic leaching procedure (TCLP) Method 1311⁵. HWs by characteristics are assigned "D" waste codes and include waste codes from D001 through D043 (40 CFR 261.2).

3.1.2 Non-hazardous Wastes

CSSA non-hazardous waste classifications are performed in accordance with state regulations in 30 TAC §335, Subchapter R as “non-hazardous industrial like wastes” or non-hazardous special waste. Solid wastes, which do not meet the HW criteria as defined in 30 TAC §335.504, are classified as non-hazardous like wastes. non-hazardous like wastes may be further classified as Class 1 (30 TAC §335.505 and §335.508), Class 2 (30 TAC §335.506 and §335.508), or Class 3 (30 TAC §335.503, §335.507, and §335.508).

3.2 WASTE ACCUMULATION AND STORAGE

HWs, once generated, can be temporarily accumulated at the point of generation and later stored for a limited length of time at designated storage areas. There are no specific regulations that establish procedures for accumulation or storage of non-hazardous wastes. However, the general prohibition in 30 TAC §335.4, which prohibits management of hazardous constituents in manners harmful to human health and the environment, applies to all non-hazardous waste management activities, including accumulation and storage. In addition, the generator of industrial non-hazardous wastes is required to comply with the notification requirements as established in 30 TAC §335.6. CSSA is not a generator of industrial waste, but does maintain a Notice of Registration (NOR) with the TCEQ which allows for notification procedures.

The RCRA regulations establish specific procedures and requirements for accumulation and storage of HWs. Regulations in 40 CFR 262.34 define the length of time and the quantity of HWs that may be accumulated at waste generation points. The regulations allow accumulation of up to one quart of acutely HWs and 55 gallons of nonacute HWs at or near the point of generation (satellite accumulation point) in an area/building generating the waste. The regulations also allow a maximum of three days, within which the accumulated wastes exceeding the stipulated quantities should be transferred to a TSD unit. During the waste accumulation, waste containers should be compatible with the waste, labeled according to regulations, and closed during periods of no waste transfer. When containers are full, add storage start date to label.

Waste storage may be accomplished in tanks or containers such as vats or drums. HW storage units can be operated to store wastes for no longer than 90 days without obtaining a RCRA permit or interim status for the unit (40 CFR 262.34). Such units are also exempt from certain RCRA regulations such as operational and closure requirements. Small quantity generators may store HW for 180 days without a RCRA permit provided that the generator complies with the requirements of 40 CFR 262.34(d).

As long as CSSA maintains its CESQG status, none of the above-mentioned HW time limits apply.

⁵ *Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846.

3.3 ONSITE WASTE TRANSFERS

Waste generated or accumulated will require transfer to onsite units for storage. Waste transfers may be accomplished at satellite accumulation points in bulk or using containers such as 55-gallon drums.

The onsite transfers of hazardous and non-hazardous wastes do not require any permitting and are not specifically covered by any regulations as long as all waste movements occur within contiguous boundaries of the facility. However, general prohibitions that require all waste management activities to be protective of human health and the environment also apply to onsite waste transfers. All onsite waste transfers are also subject to emergency preparedness and spill response planning. In addition, such transfers should comply with HW storage regulations and transfer containers must be compatible with the wastes and labeled according to regulations.

3.4 WASTE TREATMENT AND DISPOSAL

Wastes generated and accumulated at a facility will have to be ultimately treated and/or disposed. Waste treatment and disposal may take place either at an onsite or an offsite facility, or a combination of both. Specific treatment requirements have been established for most HWs prior to disposal. There are no regulatory treatment requirements for non-hazardous solid wastes prior to disposal. The treatment and disposal standards for the installation wastewater and storm water discharges are established under CWA and TPDES.

Non-hazardous solid wastes can be disposed of only at facilities which have been approved for receipt of such wastes. Offsite facilities for disposal of non-hazardous wastes must be state-permitted facilities. However, on-site facilities for disposal of non-hazardous wastes do not require permitting, but do require notification to the TCEQ and incorporation of such facilities into the installation NOR.

HW TSD activities are governed by various state and federal regulations. The majority of state regulations incorporate federal regulations by reference. CSSA is not a permitted facility for the treatment or disposal of HW.

3.5 OFFSITE WASTE TRANSPORTATION

Wastes that are generated and stored at CSSA are transported to offsite facilities for treatment and/or disposal. Offsite waste transportation (both interstate and intrastate transports) are regulated both under RCRA and the Department of Transportation (DOT). A RCRA permitted transporter must perform the offsite transportation of HWs. State-permitted transporters must perform offsite transportation of non-hazardous solid wastes. All contractors managing or transporting waste at CSSA must contact the Environmental Office prior to arriving on post.

The RCRA regulations that are applicable to HWs transportation are established at 40 CFR Parts 262/263. The regulations in 40 CFR Part 262 establishes the requirements with which a generator must comply with respect to waste manifest, pre-transport preparations, and recordkeeping and reporting. The regulations in 40 CFR Part 263 applies to transporters of HWs. As CSSA does not itself transport HWs, only the generator requirements established in 40 CFR Part 262 will be discussed in this document. In addition to the RCRA regulations, state

regulations established at 30 TAC §335.10 (Shipping and Reporting Procedures Applicable to Generators of HW or industrial non-hazardous Class 1 Waste) are also applicable.

HW generators are required to prepare manifests, in accordance with 40 CFR 262.20, 262.22, and 262.23, for wastes designated for offsite management. The generator must also meet pre-transport requirements established in 40 CFR 262 Subpart C. Pre-transport requirements are essentially the packaging, labeling, and placarding requirements established by the DOT in 49 CFR Parts 171-179, incorporated by reference under RCRA. In addition, RCRA also requires generators to maintain records and to periodically report HW shipments (40 CFR Part 262.40 and 262.41). The state requirements for generators shipping HWs for offsite management (30 TAC §335.10) are essentially identical to the RCRA requirements.

The DOT regulations governing the transport of HWs are established in 49 CFR Parts 171-180. These regulations include the requirements for hazard class determination (Part 173), pre-transport preparation (Part 172), and packaging specifications (Part 178). The DOT regulatory requirements, including recordkeeping and reporting, are in addition to the RCRA requirements, although these requirements overlap or are identical. In other words, the generator should comply with both the RCRA and DOT requirements. Although the generator may not be physically performing offsite transportation or disposal activities, the generator is ultimately responsible for the wastes shipped offsite.

3.6 SPILLS AND RELEASES

Spills and releases of hazardous constituents may occur at the installation from material storage units, transfer areas, various processes, and waste management areas. All spill residues, including spill cleanup debris, should be classified based on the type of material or waste spilled and the characteristics of the residues. The residues should be managed in accordance with the regulations applicable to the waste classification. Spills and accidental releases of hazardous materials and oils are also discussed in Section 5 and presented in detail in the Spill Prevention, Control, and Countermeasures Plan (SPCCP) and the Installation Spill Contingency Plan (ISCP), June 2007, in accordance with AR 200-1, 3-6(a)(b), installations will establish and maintain procedures to identify the potential for and to respond to accidents and emergencies, and for preventing and mitigating the environmental impacts that may be associated with them. These procedures will be tested periodically. Installations/facilities will review and revise, where necessary, emergency preparedness and response procedures. In particular, critical reviews and revisions should be conducted after any occurrence of accidents or emergencies.

Oil spills are regulated under 40 CFR Part 112. All facilities with oil storage capacity in excess of a specified volume are required to prepare and implement an SPCCP. Any oil spills in excess of the reportable quantities should be reported to appropriate local, state, and federal agencies.

All HW TSD facilities, including those containing only less-than-90 day storage facilities, are required to prepare and implement an emergency contingency plan, except for a CESQG, like CSSA. Any spills of hazardous constituents listed in 40 CFR Part 117 to navigable waters of the United States in excess of the reportable quantities should be reported to the appropriate local, state, and federal agencies. In addition, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) also require notification to local, state, and federal

agencies in the event of releases of HWs or constituents listed in 40 CFR 302 in excess of reportable quantities.

Furthermore, under the Texas Oil and Hazardous Substances Spill Prevention and Control Act, the TCEQ, has prepared a spill contingency plan (State of Texas Oil and Hazardous Substances Spill Contingency Plan, November 1997). CSSA must also comply with the requirements of the act and procedures established in the state spill contingency plan when responding to an oil or hazardous substance spill on the installation.

SECTION 4

WASTE MANAGEMENT TASKS

This section describes various activities involved in HW management at the installation. Specific procedures for the waste management activities, such as waste identification, accumulation, labeling, storage, and disposal, are presented in appendices B through H. The following is a brief description and overview of each of the waste management activities at the installation.

4.1 WASTE IDENTIFICATION

Waste management activities begin at the point of waste generation. The waste classification dictates the sequence of subsequent waste management activities. Hence, the first and foremost activity, once a waste is generated, is to properly identify and classify the waste. The following is a brief description of waste identification activity, and the specific waste identification procedures for implementation at the installation are presented in Appendix B.

The installation may generate non-specific hazardous and specific non-hazardous industrial like wastes (Section 2). Routinely generated industrial like waste streams will be identified and classified in accordance with 30 TAC §335 Subchapter R. If any new waste streams are generated, an existing waste stream is no longer generated, or the waste classification regulations are amended, the installation NOR should be updated. Documentation on a new waste stream should be submitted to the TCEQ within 90 days of initial waste generation, in accordance with 30 TAC §335.513. If the waste analytical results show characteristics different than those used in the waste classification for all generated waste streams, the installation NOR will be updated, if and as necessary.

Any new and/or one-time hazardous wastes generated will require waste characterization for waste classification. Waste characterization may be based on process knowledge or on the results of chemical analysis. After waste classification, the hazardous waste stream may be added to the installation NOR or managed using a one-time disposal code from the TCEQ. Documentation regarding new waste streams generated should be sent to TCEQ within 90 days of generation, in accordance with 30 TAC §335.513.

4.2 WASTE ACCUMULATION

Waste can be accumulated in containers at the initial point of waste generation to increase the efficiency of waste collection, for convenient waste handling and management activities, and to reduce the costs of waste management. At CSSA, wastes are to be accumulated in 55-gallon containers at the point of waste generation or within designated waste storage area(s). The waste accumulation rules in 40 CFR 262.34 specify that, at the point of generation, up to 55 gallons of waste or one quart of acutely HW can be accumulated. When the accumulated waste volume exceeds 55 gallons or one quart, the wastes must be transferred to a designated waste storage facility within three days.

The initial waste accumulation points are exempt from the requirements of an interim status or a permitted HW storage unit. However, the waste accumulation activities must be conducted in a manner that is protective of human health and the environment. In addition, if wastes

accumulated in excess of specified amounts (55 gallons for HW and one quart for acutely HW) are not transferred within three days after exceeding the limit; the waste must be managed in accordance with all applicable regulatory requirements including TSD. At such a point in time, the accumulation area becomes a HW storage unit, and thus, must comply with all applicable regulations with regard to the use and management of containers, inspections, recordkeeping, training, preparedness and prevention, contingency plan, and emergency procedures. The container holding the excess accumulation of HW must be marked with the date the excess amount began accumulating.

The CSSA Environmental Office must authorize all waste accumulation areas prior to waste accumulation activities. Prior to the approval of a new waste accumulation site, the Environmental Office will consider potential health and environmental consequences in the event hazardous constituents are released during a spill, fire, or explosion, or otherwise released from the accumulation site. Containers holding wastes or materials that are incompatible, if located within an accumulation site, must be separated by a physical barrier or maximum possible distance.

The activities preceding the actual waste accumulation involve obtaining a compatible empty waste container and labeling the container. All waste accumulation activities must be under the control of the operator of the process generating the waste. When the container has completed receiving wastes, it will be designated for pickup and transfer to an onsite container storage area. Specific procedures to be followed during the waste accumulation activities are described in Appendix A. The waste accumulation activities will also require knowledge of container labeling requirements and procedures, which are described below.

The CSSA Safety Office and the waste generator has material safety data sheets for hazardous substances stored or used on site, which is accessible to personnel working at CSSA.

Many HWs, when mixed with other waste or materials at a HW facility, can produce effects which are harmful to human health and the environment, such as

- 1) heat or pressure,
- 2) fire or explosion,
- 3) violent reaction,
- 4) toxic dusts, mists, fumes, or gases, or
- 5) flammable fumes or gases.

Table 4.1 list examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences, which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of TSD facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potential incompatible waste materials or components.

Table 4.1 List of Example Incompatible Wastes

GROUP 1-A

Acetylene sludge	Caustic wastewater
Alkaline caustic liquids	Lime sludge and other corrosive alkalis
Alkaline cleaner	Lime wastewater
Alkaline corrosive liquids	Lime and water
Alkaline corrosive battery fluid	Spent caustic

GROUP 1-B

Acid sludge	Etching acid liquid or solvent
Acid and water	Pickling liquor and other corrosive acids
Battery acid	Spent acid
Chemical cleaners	Spent mixed acid
Electrolyte, acid	Spent sulfuric acid

(Potential consequences: heat generation; violent reaction)

GROUP 2-A

Aluminum	Magnesium
Beryllium	Potassium
Calcium	Sodium
Lithium	Zinc powder
	Other reactive metals and metal hydrides

GROUP 2-B

Any waste in Group 1-A or 1-B

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

GROUP 3-A

Alcohols	Water
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Table 4.1 (continued)

GROUP 3-B

Any concentrated waste in Groups 1-A or 1-B	Potassium
Calcium	SO ₂ Cl ₂ , SOCl ₂ , PCl ₃ , CH ₃ SiCl ₃
Lithium	Other water-reactive waste
Metal hydrides	

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

GROUP 4-A

Alcohols	Nitrated hydrocarbons
Aldehydes	Unsaturated hydrocarbons
Halogenated hydrocarbons	Other reactive organic compounds and solvents

GROUP 4-B

Concentrated Group 1-A or 1-B wastes	Group 2-A wastes
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Potential consequences: Fire, explosion, or violent reaction.

GROUP 5-A

Spent cyanide and sulfide solutions.

GROUP 5-B

Group 1-B wastes.

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

GROUP 6-A

Chlorates	Nitrates
Chlorine	Nitric acid, fuming
Chlorites	Perchlorates
Chromic acid	Permanganates
Hypochlorites	Peroxides
	Other strong oxidizers

Table 4.1 (continued)

GROUP 6-B	
Acetic acid and other organic acids	Group 4-A wastes
Concentrated mineral acids	Other flammable and combustible wastes
Group 2-A wastes	

Potential consequences: Fire, explosion, or violent reaction.

Note: This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g. adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists above, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Source: *Law, Regulations, and Guidelines for Handling of Hazardous Waste*. California Department of Health, February 1975.

4.3 WASTE LABELING

All waste containers must be labeled to sufficiently describe the waste and the collection and management dates and periods. These labels must be affixed to the containers prior to initiating the waste collection. A properly completed label should be present on the container at all times until waste disposal. Waste labeling activity is an integral part of all waste accumulation, storage, and transportation activities. Under certain circumstances, placarding may be necessary in place of labeling to comply with the DOT regulations. However, for the HW management scenarios anticipated at the CSSA, placarding may not be required.

Waste labeling requirements are established both under RCRA regulations and DOT regulations. The RCRA regulations apply to all waste labeling required during the waste accumulation and storage activities. In addition, EPA has expressly adopted the DOT regulations governing transportation of HWs (49 CFR Parts 171 through 179). Both EPA and the DOT have authority to enforce regulations applicable to waste transportation outside the installation, including waste labeling.

At CSSA, in addition to the containers that hold hazardous or non-hazardous class 1 like solid wastes, empty containers that previously held hazardous or non-hazardous class 1 like wastes will also require labeling if not crushed and managed as a waste of scrap metal for recycling. The containers that held HWs and are empty, as defined in 30 TAC §335.41(f) and 40 CFR 261.7, will be labeled with a "HAZARDOUS EMPTY" label. The containers that held non-hazardous Class 1 like wastes and are determined empty in accordance with 30 TAC §335.41(f) will be labeled with a "NON-HAZARDOUS EMPTY" label. Containers that held non-hazardous Class 1 like wastes, if disposed, should be disposed of as non-hazardous Class 1 wastes in accordance with 30 TAC §335.508(2).

The specific waste labeling procedures are presented in the appropriate SOPs in Appendix A, along with the example label forms.

4.4 ONSITE WASTE TRANSFERS

Wastes accumulated at the initial generation points will be transferred to Bldg 86, CSSA's HW storage facility (TCEQ facility number 02), if applicable. The onsite waste transfer activities are not specifically regulated under RCRA. However, all such activities should be conducted in a manner that is protective of human health and the environment.

Waste handlers who receive training in proper waste handling practices perform onsite waste transfers. If transferring containers from a satellite accumulation area, the generator must arrange for container transfer within 3 days from the time the containers meet the accumulation volume limit.

The containers will be picked up and transferred using a government vehicle/truck. The containers will be loaded on to the truck and unloaded in the container storage area using a forklift. All loading, unloading, and transit operations will be conducted in such a manner as to ensure the integrity of the container, to avoid any releases of hazardous substances, and to ensure safety of the operators.

4.5 WASTE STORAGE

The HW storage facility at CSSA consists of a container storage area at Building 86 (TCEQ facility number 002). HWs accumulated at the initial generation points will be transferred to the container storage facility for storage until transportation. Most HW storage at this facility is accomplished using 55-gallon drums or smaller containers.

The waste storage activities at CSSA involve ensuring integrity of waste containers, storage facility operation and maintenance procedures, inspections, and record keeping.

4.6 OFFSITE WASTE TRANSPORTATION

Offsite waste transfer occurs when wastes generated at CSSA are shipped for treatment and/or disposal at offsite facilities. Designated personnel at the initial waste generation point or the waste storage area must notify the Environmental Office when an offsite waste transfer is necessary. The offsite waste disposal facilities may include offsite incineration and land filling facilities. All offsite transfers from CSSA will be initiated by the Environmental Office.

The offsite waste transfer may occur in containers and/or bulk. Typically, HWs, if generated at CSSA, are sent for disposal offsite in containers. Offsite transportation of waste may occur in bulk for waste oils and fuels. Offsite transportation of wastes from CSSA is performed by outside contractors.

Offsite waste transfer involves proper containerizing of wastes, recordkeeping, and reporting.

4.7 ENVIRONMENTAL MANAGEMENT SYSTEM DOCUMENTATION AND DOCUMENT CONTROL

In accordance with AR 200-1 (Chapter 15-9), installations will:

- Establish and maintain information in paper or electronic form to describe the core elements of the management system and their interaction, and provide direction to related documentation.
- Installations will establish and maintain procedures for controlling all documents required by the ISO 14001 standard to ensure that: they can be located; they are periodically reviewed, revised as necessary, and approved for adequacy by authorized personnel; the current versions of relevant documents are available at all locations where operations essential to the effective functioning of the EMS are performed; obsolete documents are promptly removed from all points of issue and points of use, or otherwise assured against unintended use; and any obsolete documents retained for legal and/or knowledge preservation purposes are suitably identified.
- Documentation will be legible, dated (with dates of revision), and readily identifiable, maintained in an orderly manner and retained for a specific period. Procedures and responsibilities will be established and maintained concerning the creation and modification of the various types of documents.

SECTION 5

SPILL PREVENTION, REPORTING AND RESPONSE

Accidental spills and releases may occur at the installation during various steps of hazardous materials and waste management activities. These spills may occur at process and operation areas using or generating hazardous substances, or at waste accumulation, transfer, or TSD facilities. Spill response actions are required for any imminent or actual spills or releases at CSSA.

Federal regulation contained in Title 40 CFR Part 110 defines oil spills or releases that are prohibited under Federal Water Pollution Control Act (FWPCA). Federal regulations at 40 CFR Part 112 require that the installation prepare and implement an SPCCP to address oil spills or releases prohibited under 40 CFR Part 110. This regulation establishes procedures, methods, and equipment to prevent discharge of oil from non-transportation-related facilities into surface waters. Additionally, the installation must develop and implement an SPCCP as well as a facility spill contingency plan for each oil and hazardous material storage facility that does not have adequate spill prevention structures in place (AR 200-1, Chapter 11(b)(1), *Storage Tank Systems/Oil and Hazardous Substances Spills*).

CERCLA, RCRA, and Army regulations expand the scope of the SPCCP to incorporate responses to spills and releases of hazardous substances as defined in 40 CFR 302.3. Also, the CWA requires that entities notify appropriate government agencies after certain hazardous substance discharges to navigable waters. In addition, the *State of Texas Oil and Hazardous Substances Spill Contingency Plan*, dated November 1997, also requires notification and response actions following releases of oil and hazardous substances.

In accordance with the requirements of the above-mentioned regulations, CSSA has prepared and implemented an SPCCP⁶. The plan describe the potential spill sites and equipment and measures available to prevent, control, and respond to spills and releases of oils or hazardous substances. The procedures and policies for the prevention and response of potential or actual emergency situations including releases of hazardous constituents are detailed in the SPCCP.

⁶ Weston, 2007. *Spill Prevention Countermeasures and Control Plan*, June 2007.

SECTION 6 POLLUTION PREVENTION PROGRAM

Pollution prevention is the Army's preferred approach, where timely and cost-effective, to achieve and maintain compliance with environmental laws and regulations. Pollution can be prevented from all sources to the extent practicable by:

- Reducing pollutants at the source;
- Modifying manufacturing, packaging, and shipping processes, maintenance or other industrial practices;
- Modifying product designs;
- Developing and modifying acquisition systems;
- Recycling and reuse (to include implementing water and energy consumption measures), especially in closed-loop processes;
- Preventing disposal and transfer of pollution prevention between media;
- Meeting affirmative procurement requirements and promoting the acquisition and use of environmentally preferable products and services;
- Promoting use of nontoxic substances; and
- Incorporating pollution prevention planning throughout the mission, operation, or product life cycle.

Pollution prevention planning encourages facilities to conduct long-range planning that will strengthen efforts to prevent pollution, to save money, to reduce liability, and to lessen regulatory burden.

In June 1991, the State of Texas promulgated the Waste Reduction Policy Act (WRPA, formerly known as Senate Bill 1099) which required certain generators of HWs and those reporting hazardous constituents releases under the Superfund Amendment and Reauthorization Act (SARA) Title III, Section 313 to develop source reduction and waste minimization plans (pollution prevention plan). The rules implementing the WRPA are established by Title 30 TAC §335.471 through §335.480. Although requirements for a SQG are greatly reduced under WRPA and exempt CESQG who do not report releases under SARA requirements, CSSA will generally strive to comply with the requirement for a small quantity generator, as applicable.

The Pollution Prevention Act of 1990 established a national policy for environmental protection by setting up an environmental management system. This act changes the national focus from "end-of-the-pipe" or pollution control to "point of origin" or pollution prevention. Also, the act sets a national hierarchy for HW management; source reduction is the method of choice, followed by recycling and treatment, with disposal as a last resort.

In addition, federal regulations under SARA Title III reporting require HW generators and facility operators to document pollution prevention programs at their facilities. The WRPA gives the TCEQ the authority to administer the law under these rules (RG-209, Revised, April 2004). According to TCEQ RG -409 publication, WRPA applies to:

- Large and small quantity generators (LQGs) of HW
- Facilities that report on the TRI Form R

CSSA generates very little hazardous waste and only sporadically and is classified as a CESQG with no reporting requirements under the SARA TRI program. Therefore WRPA does not apply to CSSA and pollution prevention plans are not necessary and are not expected to be produced. However, CSSA is committed to continually explore opportunities to reduce pollution for a better and a safer environment. Appendices H and I are CSSA standard operating procedures (SOPs), which detail responsibilities and procedures for management of HW and hazardous materials, respectively.

SECTION 7 PERSONNEL TRAINING

Training is essential to the efficient and safe operation of all hazardous material/waste management processes and to ensure rapid and effective responses to emergency conditions. The following is a brief description of the personnel training program at CSSA.

7.1 PROGRAM OVERVIEW

Although annual training exercises are not required for small quantity generators without a RCRA permit, appropriate installation personnel attend training provided/contracted by CSSA. The primary personnel training requirements of RCRA include compliance with HW regulations, and response to emergency situations.

The personnel training is provided for the CSSA employees involved in activities that may expose them to hazardous substances, or health or safety hazards. The training program includes initial training and site-specific training, including on-the-job training.

The purpose of the introductory and continuing training program is to educate the employees responsible for oil and waste management activities, toward minimizing risk to human health or the environment. The program also seeks to thoroughly familiarize personnel with their duties and responsibilities.

7.2 RECORDKEEPING

Training records for each employee in a position related to waste management will be maintained by the Environmental and Personnel offices. These records will include the name of each employee, the job description of all positions held by the employee, the dates of employment for each position, and a description of the type and amount of training received. CSSA Personnel, who have received and successfully completed the training, will be given a certification of completion by their instructor, head instructor, or trained supervisor. Formal training received by installation employees is annotated in the employee's personnel file, maintained by the Post Personnel Office.

Training records on current personnel will be kept on file until closure of the facility. Training records on former employees will be maintained for three years after the employee last worked at the facility.

SECTION 8 RECORDKEEPING AND REPORTING

Federal and state regulations establish requirements for record keeping and reporting for various waste management activities conducted at CSSA. These requirements cover activities including waste generation; waste analysis; waste TSD; and spills and releases. The HW program under RCRA requires "cradle to grave" tracking of HWs; that is, managing wastes from the point of generation to the point of TSD. The following is a brief description of recordkeeping and reporting requirements which may be applicable to CSSA.

8.1 RECORDKEEPING

Various recordkeeping requirements have been established for many of the waste management activities. State regulations at 30 TAC §335.9 require that industrial generators maintain records of all HW activities regarding the quantities generated, accumulated, processed, and disposed of on site or shipped off site for storage, processing, or disposal. These records may be maintained in any format, provided they are retrievable and easy to copy. The records must be sufficiently detailed and complete to support any contentions or claims made by the generator pertaining to waste management activities. Waste records are maintained at the CSSA Environmental Office. These requirements are described below for each waste management activity.

8.1.1 Waste Generation

The state regulations (30 TAC §335.501 to §335.515) allow self-classification of waste streams by the generator. However, the generator is required to document and maintain all available information necessary to classify the waste stream, as follows:

- Records noting the waste description, characteristics, and classification of each waste should be maintained.
- The quantity of wastes generated should be recorded.
- All records of any test results, waste analyses, or other determinations performed for waste streams generated at CSSA should be maintained (30 TAC §335.70).

The generator is also responsible to provide the above information to the Environmental Office. Although recordkeeping requirements for a CESQG are greatly reduced under 30 TAC 335.78, CSSA will generally strive to comply with the requirement for a small quantity generator.

CSSA must notify the TCEQ of all HW streams and HW waste management units at the installation and be listed on the installation NOR.

8.1.2 Waste Storage

An industrial generator, in accordance with the state notification requirements, should notify the Executive Director (TCEQ) of waste storage areas as waste management units. Information pertaining to whether the unit is permitted or qualifies for an exemption as a less-than-90 day storage unit should also be submitted. In addition, a listing of the wastes managed in the unit should be provided.

An industrial generator must maintain records of the types of wastes stored or managed in the unit, quantity of wastes stored, and storage area inspection and maintenance. These records should be on file at the installation and should be available for review during an installation inspection. These records should be maintained for at least three years after the unit is closed.

CSSA, as a non-industrial facility, voluntarily complies with state recordkeeping requirements for the generation and management of HW. However, CSSA generated non-hazardous municipal waste is neither reported nor recorded on their NOR.

8.1.3 Spills and Releases

CSSA must maintain records of spills and releases of harmful quantities of oil and hazardous substances on the installation. Records of spills should include written descriptions of spills, corrective actions taken, and plans for preventing recurrence. A detailed description of the recordkeeping requirements pertaining to spills and release of oil and hazardous substances are presented in the SPCCP.

8.2 REPORTING

Industrial generators are also required to notify and submit reports to the regulatory agencies regarding various waste management activities. These reporting requirements, for which CSSA voluntarily complies, are described below.

1. Each generator of HWs must submit an annual waste summary on the specified TCEQ Form (*Annual Waste Summary Form*). The instructions for preparation and the mailing address are contained on the form. This form must be submitted to the TCEQ by January 25 of each year [30 TAC §335.9(a)(2) and §335.71(a)] if submitted in paper form and by March 1 of each year if reported by State of Texas Environmental Electronic Reporting System (STEERS) through TCEQ.
2. Releases of oil and hazardous substances in harmful quantities into the environment will require certain notification and reporting. These requirements are described in the CSSA SPCCP.
3. In the event the ISCP is implemented in response to an emergency situation, CSSA must submit an incident report within 15 days after the incident to the Executive Director.

Index of Standard Operating Procedures at CSSA

Number	Name
SOP-001	Aerosol Can Puncturing
SOP-002	Universal Waste Management: Batteries, Pesticides, Mercury-containing Equipment, Fluorescent Bulbs, Paint and Paint-related Waste
SOP-003	Handling of Empty Containers
SOP-004	Handling of Partially Filled Containers
SOP-005	Labeling and Marking of Hazardous Waste Containers
SOP-006	Recycling
SOP-007	Municipal and Non-hazardous Solid Waste
SOP-008	Operation of Safety Kleen Parts Washers
SOP-009	New Container Requirements
SOP-010	Used Oil Requirements
SOP-011	Handling of Used Antifreeze
SOP-012	Handling of Used Gasoline and Used Fuel Filters
SOP-013	Labeling and Marking of Non-hazardous Waste Containers
SOP-014	Oil-base Paint Brush Cleaning
SOP-015	Latex, Water-based Paint Brush Cleaning
SOP-016	Spent Small Arms Ammunition Cartridge Management
SOP-017	Management of Air Pollution Control Filters from Munitions Range Activity
SOP-018	Used Abrasives
SOP-019	Regulated Asbestos-Containing Material
SOP-020	Management of Waste Water from Water-jet Cutter and Citrus-based Solvent Washers

Procedure: Aerosol Can Puncturing		
Document ID: SOP-001		
Document Owner:	Approval:	Revision: 1 Revision Date: 14 Sep 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

Provide a standard procedure for the puncturing of empty or damaged aerosol paint cans and for the disposal of all wastes collected from aerosol can puncturing at Camp Stanley Storage Activity (CSSA).

APPLICABILITY

This SOP applies to CSSA personnel in the HAZMART (Bldg 93) that drain liquids and propellant from empty or damaged aerosol paint containers. An aerosol can is considered "empty" when the product can no longer be propelled from the can in accordance with the manufacturer's directions. An aerosol can is considered "damaged" when the can's structure or mechanism (e.g., clogged nozzle) is such that the product can no longer be safely or efficiently propelled from the can. Shops should use as much as possible of the product prior to bringing empty or damaged aerosol cans to the HAZMART.

Aerosol can products that may be punctured at the HAZMART include:

- paints
- petroleum-based products (WD-40, brake cleaner),
- adhesives, and
- pesticides.

Each of these products should be drained into a separate drum such that different types of products do not mix. Waste products are collected in an appropriate and approved container attached to the "aerosol can puncturing unit". The containers are located on secondary containment pallets within the HAZMART.

Waste paints, including both water- and oil-based paints, are considered Universal Waste as described in 30 TAC 335.262(b) (see SOP-002). Petroleum-based products are disposed of as used oil (see SOP-010), dried adhesives are disposed of as municipal solid waste (see SOP-007), and pesticides are disposed of as Universal Waste (see SOP-002).

PROCESS

Note: Always wear safety glasses when managing aerosol cans to avoid eye contact.

Aerosol Can Puncturing Procedure

1. Collect the empty aerosol cans in a centralized area at the HAZMART.
2. Take the empty aerosol can to the appropriate puncturing unit.
3. The accumulation drum for the aerosol can puncturing unit should be labeled appropriately according to the type of waste it contains (i.e., paint or paint-related waste, used oil, adhesives).
4. Slide open the top plate cover of the puncturing unit.
5. Remove the stem of the aerosol can and place the can upside side down and inverted into the puncturing unit.
6. Slide and lock the top plate cover over the aerosol can.
7. Fully depress the lever handle to puncture the aerosol can.
8. Allow the aerosol can to drain for a minimum of five (5) minutes.
9. Slide the top plate cover open and remove the drained aerosol can and place in the designated collection container for scrap metal cans.
10. Wipe down the puncturing unit and the top of the collection drum if any product has dripped during puncturing and properly dispose of the rag as municipal trash.
11. The aerosol can puncturing unit filter is to be replaced when it changes color from green to red. The puncturing pin should be inspected when the filter is replaced.
12. Recycle the punctured aerosol can as scrap metal.
13. Follow the manufacturer's operation manual for more detailed information.

Aerosol Accumulation Drum Procedure

1. Once the appropriate and approved accumulation drum is $\frac{3}{4}$ full or it has been one year since the drum was started (whichever comes first), unscrew the puncturing device and the associated filter, and close and seal the drum with the 2 bungs

- provided. Make sure the date when the first material was added to the drum is on the drum label, and notify the Environmental Office at (210) 698-5208.
2. Contact the Environmental Office for a new appropriate and approved drum for the puncturing device. Place the new waste accumulation drum on the containment pallet provided inside the HAZMART. Remove the 2 bungs provided with the drum and store them for resealing the drum in a Ziploc bag taped to the side of the drum.
 3. Securely attach the aerosol can puncturing unit and the filter to the accumulation drum. If the filter has changed from green to red, discard the filter in the appropriate container provided by CSSA's environmental office as a paint and paint-related universal waste and replace with a new filter.
 4. Attach the grounding device following the directions provided in the operating manual for the unit. Ensure that the aerosol can puncturing unit is closed and sealed.
 5. Label the drum with the date the first material is emptied into the container.

Example labels for each type of waste drained from aerosol cans at the HAZMART are included as Figures 1 through 3. See the following SOPs for management of wastes drained from aerosol cans:

- SOP-002 – Universal Waste Management: Batteries, Pesticides, Mercury-containing Equipment, Fluorescent Bulbs, Paint and Paint-related Waste
- SOP-007 – Municipal Solid Waste
- SOP-010 – Used Oil Requirements



Figure 1 – Example USED OIL label for petroleum-based wastes drained from aerosol cans.

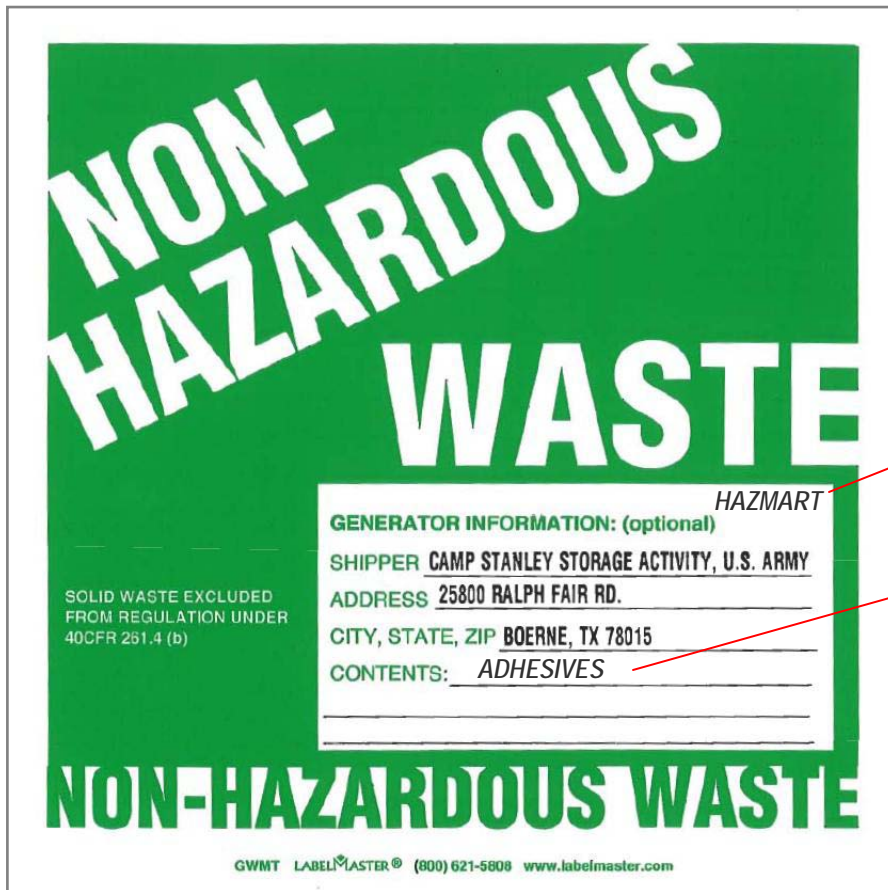


Figure 2 – Example NON-HAZARDOUS WASTE label for adhesives drained from aerosol cans.

Procedure: Universal Waste Management: Batteries, Pesticides, Mercury-containing Equipment, Fluorescent Bulbs, Paint and Paint-related Waste		
Document ID: SOP-002		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

1.0 PURPOSE

This document provides a standard procedure for all personnel associated with Universal Waste management at Camp Stanley Storage Activity (CSSA).

2.0 APPLICABILITY

This Standard Operating Procedure (SOP) applies to all CSSA personnel who handle and manage universal waste.

3.0 PROCESS

This procedure sets forth the requirements for Universal Waste Management per regulations issued by the Environmental Protection Agency; and published in *40 Code of Federal Regulations (CFR) Part 273* and authorized by *Texas Administrative Code (TAC) Title 30 Chapter 335.261* and *30 TAC 335.262* (paint and paint-related waste).

The U.S. EPA has recognized the fact that regulations covering certain wastes are more restrictive than necessary. In 40 CFR 273, the EPA has established regulations that offer alternative management standards for what it calls “universal wastes.”

Accumulation of Universal Waste (per 40 CFR 273) will be for no longer than one year from the date it was generated. The date the accumulation started shall be written on the Universal Waste packaging used for shipment offsite. Note the type of waste on the Universal Waste label. If the waste is paint or paint-related, indicate this on the label (Figure 1).

Training – A small quantity handler (less than 5,000 kilograms per year) must train personnel in the proper handling and emergency procedures for universal waste (40 CFR 273.16). Contact the Environmental Office at (210) 698-5208 to obtain training.

Recordkeeping – A small quantity handler of universal waste is not required to keep records of shipments of universal waste. Although no recordkeeping is required, universal waste manifests are maintained at the Environmental Office.

Universal Waste is defined as used batteries; off-spec pesticides; mercury-containing equipment including thermostats; fluorescent tubes and/or incandescent lamps as described in 40 CFR 273.5; and paint and paint-related waste as described in 30 TAC 335.262(b).

- *Batteries.* Non-automotive batteries should be transported to the Recycling Center at Bldg 302. Automotive (lead/acid) batteries should be exchanged for a new battery at the place of purchase, or should be transported to Motor Pool at Bldg 4 labeled with your Shop name.
- *Pesticides* are managed by Integrated Pest Management personnel at Bldg 30. Empty aerosol pesticide cans are brought to the HAZMART for puncturing and recycling.
- If *mercury-containing equipment and/or thermostats* are used or found on site, the Environmental Department should be contacted at (210) 698-5208 for proper disposal instructions.
- *Fluorescent bulbs* are generated, installed, and removed by Electrical Shop personnel at Bldg 608 under the Public Works Branch.
- *Paint and paint-related waste* are managed by CSSA's HAZMART personnel at Bldg 93 or stored in an appropriately-labeled container within Bldg 86.

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(IES)

UNIVERSAL WASTE - MERCURY THERMOSTAT(S)

UNIVERSAL WASTE - MERCURY CONTAINING EQUIPMENT

UNIVERSAL WASTE - PESTICIDE(S)

UNIVERSAL WASTE - LAMP(S)

Shop Name

ACCUMULATION START DATE: _____

Paint and paint-related waste

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX
(REQUIRED DURING TRANSPORT, WHEN MATERIAL IS ALSO
REGULATED BY 49CFR PARTS 172-180)

HANDLE WITH CARE!

Style UW05T © 2005 LABELMASTER® (800) 621-5808 www.labelmaster.com

Indicate the type of Universal Waste on the label.

If the waste is paint or paint-related, indicate this on the label.

Write the Shop name somewhere on the label.

Write the date the first material was put into the waste container.

Figure 1 – Example UNIVERSAL WASTE label.

Possible types of Universal Waste to be entered on the container label:

1. Paint and paint-related waste
2. Batteries
3. Mercury thermostat(s)
4. Mercury-containing equipment
5. Pesticides
6. Fluorescent light bulbs
(4-foot and 8-foot straight tubes)
7. Compact fluorescent light (CFL) bulbs
8. Metal halide bulbs

If you have an item that is not included on the above list, contact the Environmental Department for proper labeling or disposal procedures.

Procedure: Handling of Empty Containers		
Document ID: SOP-003		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

To provide a standard procedure for Camp Stanley Storage Activity (CSSA) personnel management of empty containers that previously held hazardous materials.

APPLICABILITY

This SOP is applicable to the handling of empty containers that held hazardous materials and does not apply to new containers provided by CSSA’s HAZMART (Bldg 93).

PROCESS

1. Make every reasonable effort to fully use the contents of all containers to ensure that as little hazardous material residue as possible is left within the container.
2. All containers shall be properly closed and sealed when not in use.
3. Empty containers shall be allowed to air dry for at least 24 hours prior to being resealed and then properly disposed through CSSA’s HAZMART.
4. Empty containers shall be taken to CSSA’s HAZMART for recycling or disposal.

If you are unsure of how to dispose of an item, call the Environmental Office at (210) 698-5208.

Procedure: Handling of Partially Filled Containers		
Document ID: SOP-004		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

Provide a standard procedure for Camp Stanley Storage Activity (CSSA) personnel handling of partially filled product containers.

APPLICABILITY

This SOP is applicable to the handling of partially filled product containers.

PROCESS

Note: Always wear proper personal protective equipment (PPE) including safety glasses when consolidating or mixing paint products and other waste materials to avoid eye contact.

Partially full containers of waste (e.g., waste paint, pesticides, petroleum waste, or other unusable hazardous materials) should be handled using the following procedures (if you are unsure of whether or not a partially-filled container holds a hazardous material, call the Environmental Office at 210-698-5208):

1. When the material in the partially filled container is no longer needed at the Shop, transfer the container to CSSA's HAZMART for proper storage or disposal.
2. HAZMART will consolidate the contents from other similar containers as much as possible into one container large enough to hold ALL of the waste material. Guidance concerning types of materials that can be consolidated may be obtained by contacting the Environmental Office at (210) 698-5208.
3. If the partially filled container does not have a CSSA HAZMART barcode, clearly label the container with the Shop name and the contents of the container and any other identifying information before taking it to CSSA's HAZMART.

4. **DO NOT** leave an unmarked partially filled container at CSSA's HAZMART without notifying the HAZMART manager.
5. Drained and properly dried containers of material should be considered empty and handled as an empty container (refer to *SOP-003: Handling of Empty Containers*).

Procedure: Labeling and Marking of Hazardous Waste Containers		
Document ID: SOP-005		
Document Owner:	Approval:	Revision: 1 Revision Date: 14 Sep 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

To provide a standard procedure for Camp Stanley Storage Activity personnel labeling and marking of hazardous waste containers.

APPLICABILITY

This SOP is applicable to the labeling and marking of hazardous waste containers. CSSA currently generates three different hazardous waste streams:

Texas Waste Code	EPA Hazardous Waste Number	Description
4027114H	D008	Wash water with lead from Building 90 Test Fire Room
4028319H	D008	Other waste/inorganic solids with lead from range maintenance activities
4029113H	D006	Citrus-based aqueous wet wash waste from Building 90

PROCESS

Place a warning label on each container used for hazardous waste collection. The following information must be placed on the hazardous waste label in indelible marker:

1. NAME (Example: CAMP STANLEY STORAGE ACTIVITY – HAZMART BLDG 93).
2. EPA WASTE NO. (see waste profile sheet) or waste description. If you are unsure of EPA Waste No., call the Environmental Office at (210) 698-5208.
3. ACCUMULATION START DATE (Date drum is full or when moved to CSSA's Bldg 86 waste storage area within 3 days of the drum being full). Note: Prior to moving the drum to Bldg 86, coordinate with the Transportation Branch to have the drum weighed at the HAZMART.
4. A DESCRIPTION OF THE CONTAINER'S CONTENTS.

**HAZARDOUS
WASTE**

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR INFORMATION:

NAME CAMP STANLEY STORAGE ACTIVITY, U.S. ARMY - SHOP NAME

ADDRESS 25800 RALPH FAIR RD PHONE 210-698-5208

CITY BOERNE STATE TX ZIP 78015-4800

EPA ID NO. / MANIFEST DOCUMENT NO. TX 2210020739 /

ACCUMULATION START DATE _____ EPA WASTE NO. D008

DESCRIPTION OF CONTAINER CONTENTS

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

STYLE WMT6

LABELMASTER® (800) 621-5808 www.labelmaster.com

Enter the date the container was full or moved to Bldg 86.

Write the Shop name somewhere on the label.

Enter EPA waste identification number here.

The following options ONLY are available for the description of the container contents:

1. 4027114H - wash water with lead, EPA Waste No: D008
2. 4028319H - inorganic solids with lead, EPA Waste No: D008
3. 4029113H - Citrus-based aqueous wet wash waste, EPA Waste No: D006

Procedure: Recycling Document ID: SOP-006		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

1.0 PURPOSE

This document provides a standard procedure for the Camp Stanley Storage Activity (CSSA) Recycling Program. Recycling as many items as possible cuts down on space needed for landfills. Recycling gives everyone a chance to minimize waste and preserve our resources.

2.0 APPLICABILITY

This Standard Operating Procedure (SOP) applies to all CSSA activities that generate recyclable materials.

3.0 PROCESS

The following is a description of CSSA recycling and handling procedures.

SOLID WASTE

Facility Recyclable Solid Waste

To help reduce the volume of solid waste requiring landfilling, CSSA has instituted a recycling program for its employees and residents. The goal of the recycling program is to divert items, such as paper, cardboard, glass, plastics, and metals, away from the municipal waste stream. CSSA's first step in implementing the recycling program is educating post personnel and residents on the benefits of recycling and the economic rewards of source reduction and recycling through the use of brochures, training classes, newsletters and post informational bulletins.

CSSA operates the recycling collection facility at Bldg 302 (Figure 1). Recyclable materials are sorted, collected and packaged at this location (Figure 2); and prepared for transport for off-post recycling. Currently, the following residential items are recycled:

- Glass jars and bottles – clear, green, and dark;
- Plastics – numbers 1-7;
- Cans – metal, tin, and aluminum;
- Paper – newspaper, phonebooks, books, magazines, and junk mail;
- Cardboard;
- Shredded paper – multi-colored; and
- Clothes hangers – metal only.

CSSA personnel should make every effort to keep recyclable materials out of the MSW stream and they recycle applicable materials at the recycling facility.

Other Solid Waste Recycling

The following solid waste streams are generated at CSSA and are recycled.

1. *Used tires* are stored at the Motor Pool at Bldg 4. The tires are collected by a contractor and transported off-post for recycling.
2. *Metal parts* such as mufflers, tail pipes and other scrap metals are transferred to the scrap metal bin near Bldg 78 by Shop personnel. The scrap metal is collected by a contractor and transported off-post for recycling.
3. *Used oil filters* are stored in 55-gallon containers outside the Motor Pool at Bldg 4. The used filters are collected by a contractor and transported off-post for recycling. The SOP for handling used oil filters for Shops other than the Motor Pool is to transport them to the Motor Pool at Bldg 4. Motor Pool personnel will handle used oil filters according to *SOP-010: Used Oil Requirements*.
4. *Oily rags* are collected in a properly marked red container in the shop area. The rags are collected by a contractor and transported off-post for laundering. Clean laundered rags are returned for reuse.
5. Typically, *used lead-acid batteries* are transported by Shop personnel to the motor pool. The batteries are stored at the motor pool until they can be transported by motor pool personnel to the automobile parts store and turned in for recycling. Lead-acid batteries may be picked up directly from the Shop by the supplier for off-post recycling.

LIQUID WASTE

1. *Used oil* is stored in 55-gallon containers within the designated storage building located outside the Motor Pool at Bldg 4. The used oil is collected by a contractor and transported off-post for recycling. Used hydraulic oil is also placed in the used oil storage container. See *SOP-010: Used Oil Requirements* for additional information.
2. *Used antifreeze* is stored in 55-gallon containers within the designated storage building located outside Motor Pool at Bldg 4. The used antifreeze is collected by a contractor and transported off-post for recycling. See *SOP-011: Used Antifreeze Requirements*.

4.0 ITEMS THAT CANNOT BE RECYCLED

The following items cannot be recycled:

- Any paper with reference to CSSA on it (unless shredded)
- Greasy paper and pizza boxes
- Wax coated paper boxes (milk cartons and juice boxes)
- Waxed paper
- Tissue paper
- Napkins and paper towels
- Paper plates and cups
- X-ray and plastic film
- Plastic bags
- Plastic microwave dishes
- Plastic toys, plant pots
- Styrofoam products
- Plate glass (window panes or mirrors)
- Carbon paper
- Twine, string, or wires
- Ceramic dishes or ovenware
- Diapers and other personal care products

Paint cans, aerosol paint cans, and thermometers must be disposed of through the HAZMART at Bldg 93. If you are unsure of how to dispose of an item, call the Environmental Office at (210) 698-5208.



Figure 1 - Recycling Collection Center at Bldg 302



Figure 2 – Labeled bin for aluminum can recycling at Bldg 302.

Procedure: Municipal and Non-hazardous Solid Waste		
Document ID: SOP-007		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

1.0 PURPOSE

This document provides a standard procedure for handling Municipal Solid Waste (MSW) at Camp Stanley Storage Activity (CSSA). For the purpose of this Standard Operating Procedure (SOP), the term MSW will encompass all non-hazardous solid wastes.

2.0 APPLICABILITY

This SOP applies to all CSSA activities that generate MSW.

3.0 PROCESS

The Texas State Solid Waste Management Regulations define MSW as that waste which is normally composed of residential, commercial, and institutional solid waste (e.g., household trash) or nonhazardous waste. MSW primarily consists of waste paper, packaging, containers, food waste, textiles and other matter derived from residential and base operations. MSW generated at CSSA also includes dry rags (excluding oily rags) and empty material containers. Municipal solid waste is placed in dumpsters and collected by truck from each Shop for transport off-post to an approved municipal waste landfill.

CSSA personnel should ensure that non-MSW materials are NOT placed in the MSW stream.

Some examples of non-MSW materials include:

- used “oily mats”;
- oily rags;
- used oil filters;
- universal waste (i.e., paints, fluorescent bulbs, pesticides);
- recyclable materials;
- hazardous waste; and

- liquid hazardous materials.

For these items, see the following SOPs:

- SOP-002 – Universal Waste Management: Batteries, Pesticides, Mercury-containing Equipment, Fluorescent Bulbs, Paint and Paint-related Waste
- SOP-006 – Recycling
- SOP-010 – Used Oil Requirements

Procedure: Operation of Safety-Kleen Parts Washers		
Document ID: SOP-008		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

1.0 PURPOSE

This document provides a standard procedure for operating the Safety-Kleen Parts Washers at Bldg 90 and the East Pasture Range at Camp Stanley Storage Activity (CSSA).

2.0 APPLICABILITY

This SOP applies to all CSSA operations that use Safety-Kleen Parts Washers.

3.0 REGULATORY COMPLIANCE

Safety-Kleen Parts Washers have a totally enclosed recycling process that effectively separates mineral spirit solvents from oil and other impurities. This process does not chemically change the resulting residual material, which can be managed as used oil according to Federal regulations and is exempt from hazardous waste disposal and recovery regulations. Federal Regulation 40 CFR 279 Subpart B, paragraph (b)(2)(iii) documents that where a mixture of mineral spirits and used oil does not exhibit ignitable characteristics, the presence of mineral spirits does not keep the substance from being treated as used oil, even when there is less than 100 percent separation.

In cases where the oily residue is classified as a regulated hazardous waste, Federal Regulation 40 CFR 261.5(a) and 261.5(g)(3) allows this waste to be placed into used oil containers and regulated as used oil.

4.0 PROCESS

4.1 General

Safety-Kleen Parts Washers are used at Bldg 90 and the East Pasture Range and use Safety-Kleen Premium Gold Solvent (containing petroleum distillates and mineral spirits), which can be recycled through distillation to ensure the units operate with fresh solvent.

4.2 Safety

Note: Rehab (Bldg 90) and the East Pasture Range personnel are responsible for the proper handling of residual material by-product and proper use of the Safety-Kleen equipment according to this SOP and the manufacturer's User Manual and specifications.

4.2.1 Read and follow the Material Safety Data Sheet (MSDS) and the unit solvent label before operating the Parts Washers.

Note: The Parts Washers are designed for use at 102°F (39°C) without forced ventilation, such as a fan or ventilation hood.

Note: If Parts Washers are used in higher temperatures, increase the spacing.

4.2.2 Keep the Parts Washers at least three feet from any potential source of ignition, such as electrical receptacles, switches, pilot lights, fixtures, contacts, or other spark-producing devices.

4.2.3 Do not place hot parts in the solvent.

4.2.4 The Parts Washers have a fusible link in the lid assembly to hold the lid open during use. Do not modify, alter, or obstruct the operation of the fusible link and do not leave unattended parts in the sink, which would interfere with closing the lid.

4.2.5 Do not smoke, eat, or drink in the work area where the parts cleaners are located. Wash hands thoroughly with soap and water after using the parts cleaners and before eating, drinking, or using tobacco products.

4.2.6 Do not operate the units in any manner that causes splashing or a mist to form.

4.2.7 Use only in well-ventilated areas.

4.2.8 Wear protective equipment, such as gloves, eyewear, or apron, and follow the protective equipment instructions on the MSDS and solvent label.

- 4.2.9 Do not clean or degrease porous or absorbent materials such as cloth, leather, wood, or paper.
- 4.2.10 Do not use the solvent to clean friction materials, such as brake linings or clutch surfaces, that will be reused.
- 4.2.11 Use only Safety-Kleen Premium Gold Solvent and do not add any other chemicals to prevent a hazardous condition.
- 4.2.12 Do not modify Parts Washers in any manner.
- 4.2.13 Turn off the Parts Washer when adding solvent.
- 4.2.14 Do not add solvent during the recycling process.
- 4.2.15 Periodically clean the sink strainer, but NEVER operate the machine without the strainer.
- 4.2.16 Do not operate or continue to operated the Parts Washer if a leak is observed. Contain the leak, absorb the leaked solvent using a spill kit, and contact the Safety-Kleen representative.
- 4.2.17 Do not leave the Parts Washer unattended when in use.
- 4.2.18 Close the lid when not in use as a safety precaution and to minimize solvent evaporation.

4.3 Cleaning Parts

- 4.3.1 Put on protective equipment.
- 4.3.2 Ensure the parts washer is plugged into a grounded, three-prong outlet that is in working order before pressing the On/Off button.
- 4.3.3 Lift the lid and ensure the lid catches and is held in the upright position.
- 4.3.4 Wipe any loose or excess dirt from the washer.
- 4.3.5 Drain all excess fluids then place parts to be washed in the washer sink.
- 4.3.6 Adjust the nozzle by centering it inside the sink.
- 4.3.7 Push the On/Off button to start the solvent flow through the nozzle and brush.

Note: If the washer does not flow, press and hold the On/Off button for 20 seconds to activate it. Repeat as needed.

4.3.8 Clean the parts in the sink avoiding splashing solvent outside of it. Use a stiff brush to remove any heavy deposits.

Note: Do not use compressed air to agitate the solvent or to dry parts. Do not use this solvent for other operations.

4.3.9 Drain cleaned parts in the parts cleaner sink for about 15 seconds or until dripping stops.

4.3.10 Push the On/Off button to stop the solvent flow.

4.3.11 Keep solvent use to a minimum by closing the parts washer lid when not in use.

4.4 Recycling Solvent

4.4.1 Ensure the washer lid is closed

4.4.2 Push the Recycle Button to transfer dirty solvent into the distillation tank and return clean fluid into the sink.

Note: This transfer takes about four minutes.

4.4.3 The Discharge Knob will be hot to touch during the recycle process. Do not touch it until the process is complete or the temperature indicator turns green and the knob is cool to touch.

4.5 Residue Removal

Note: The Recycling (distillation) process separates solids or contaminant particles (residual material) from the used solvent. Once this process is complete, the clean solvent is returned for use in cleaning parts and the residual material is collected in the base of the parts washer.

4.5.1 CSSA personnel will remove the residual material from the washer, collect it in an appropriate container in a satellite accumulation area at Building 90, transport it to the Bldg 86 waste storage area, and notify the Environmental Office. The Environmental Office will ensure that the residual material is tested for metals content prior to shipment off-post. This residual material will be treated as used oil (see SOP-010); therefore a Used Oil label should be affixed to the storage drum. Below the Used Oil label, affix a HOLD FOR TEST RESULTS label (see examples below).

USED OIL

SLUO Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

HOLD FOR TEST RESULTS

Write the date the
sample was collected
for analysis.

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Procedure: New Container Requirements		
Document ID: SOP-009		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

Provide a standard operating procedure (SOP) for Camp Stanley Storage Activity container requirements holding liquid and solid wastes (both non-hazardous and hazardous).

APPLICABILITY

This SOP is applicable to the use of appropriate containers (30 to 55 gallon size drums) for both nonhazardous waste and hazardous waste collection and accumulation. The containers shall be maintained in accordance with the procedures outlined below.

PROCESS

Container Requirements

Ensure that the appropriate size containers (30- to 55-gallon drums) are used for both nonhazardous waste and hazardous waste collection and accumulation. The Shop authorized personnel shall ensure that the containers are maintained in accordance with the procedures outlined below. The containers for liquid waste must:

1. Be kept closed and sealed except when removing, adding, inspecting, or sampling waste; or venting the container.
2. Be in good condition having no dents or rust, and closure rings or bungs must be tightly fitted.
3. Be made of or lined with a material which will not react with the waste it will contain.
4. Be opened, closed, and handled in a manner to prevent rupture or leakage of the containers.

5. Each container should have sufficient space (4 inches) between the surface of the liquid and top of the container to ensure neither leakage from overflow nor distortion of the container as a result of expansion.
6. Unused or partially used hazardous materials may be kept in the original 5-gallon (or smaller) containers at Shop as long as the quantity limit, labeling, and container handling requirements are met. Should you have any questions regarding if the waste is a hazardous waste or not, please call the Environmental Office at (210) 698-5208.
7. Small containers must be repackaged into Department of Transportation (DOT) specification drums (i.e., 30 or 55 gallon drums) prior to transportation. This is usually done by the disposal company.

Procedure: Used Oil Requirements		
Document ID: SOP-010		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

1.0 PURPOSE

Provide a standard operating procedure (SOP) for the management of used oil and other waste materials generated from the handling of used oil. This SOP incorporates regulations stipulated by the "Standards for the Management of Used Oil" (40 Code of Federal Regulations [CFR] 279) as well as the Spill Prevention, Control, and Countermeasure Plan (SPCC) adopted by Camp Stanley Storage Activity (CSSA).

2.0 APPLICABILITY

This SOP applies to all Shops/activities that generate used oil, used hydraulic fluid, and other waste materials generated from the handling of used oil including:

- Used oil filters;
- Oily rags; and
- Used oil absorbents.

3.0 PROCESS

(USED OIL IS NOT TO BE DISPOSED OF DOWN ANY DRAIN OR CATCH BASIN)

Used oil is defined as "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" (40 CFR 279.1). Used oil is currently not classified as either a hazardous waste or a universal waste, but is subject to the federal requirements under 40 CFR 279. Although classified as non-hazardous, waste oil shall not be placed in the regular trash or disposed of down the drain, or catch basin. When used oil requires disposal, the following procedures shall be followed:

Used Oil

1. When changing oil, ensure that no spills occur and the oil is drained into the designated used oil container using a funnel and rags. All oil changes must occur over a solid surface away from any unprotected floor drains.
2. Immediately transfer used oil to the used oil container located outside the Motor Pool at Bldg 4.
3. Ensure the top of the used oil container remains closed at all times unless a transfer of used oil is occurring.
4. Ensure that the used oil container is always labeled “USED OIL” (Figure 1). **Do not label the container with a Non-Hazardous Waste label.**
5. Document any releases of used oil and associated cleanup activities in accordance with the CSSA SPCC.
6. Used oil will be collected by a contractor for offsite recycling.
7. Contact the Environmental Office at (210) 698-5208 to arrange for disposal if the storage container reaches 4 inches from the top of the container.

Used Oil Filters

1. Used oil filters will be allowed to drain into a used oil collection pan prior to disposal.
2. Allow used oil filters to drain for a minimum of one hour or until all free flowing oil has been allowed to drain from the filter. Handle collected used oil as described above. Once drained, the used oil filter should be crushed.
3. Place drained oil filters into the dedicated oil filter storage drum outside the Motor Pool at Bldg 4.
4. Ensure that the used oil filter container is labeled with a “USED FILTERS – OIL” label (Figure 2).
5. Used oil filters will be collected by a contractor for offsite recycling.
6. Contact the Environmental Office at (210) 698-5208 to arrange for disposal if the storage container reaches $\frac{3}{4}$ of the container capacity.

Oily Rags (Red Rags)

1. Place red rags in a contractor-provided metal storage container.
2. Oily rags will be collected by a contractor at the Motor Pool (Bldg 4) and the Ordnance Maintenance Branch (Bldg 90) shops and laundered offsite.
3. Clean rags will be provided at the time of the red rag pick-up.
4. Oily red rags shall not be disposed of as municipal solid waste.

Oily Rags (Non Red Rags)

1. Rags saturated with oil that are not contractor-managed red rags shall be stored in a used oil container located outside the Motor Pool at Bldg 4.
2. Ensure that the used oil container is always labeled “USED OIL” (see example label below). **Do not label the container with a Non-Hazardous Waste label.**
3. Used oily rags will be collected by a contractor for offsite recycling.
4. Contact the Environmental Office at (210) 698-5208 to arrange for disposal when the storage container is $\frac{3}{4}$ full.

Used Absorbents

1. Used absorbent patches (“Sta Dri”, pads, etc) may be disposed of as municipal solid waste in concurrence with Environmental Office policy.
2. Used absorbent floor sweep (“Speedy Dry”, etc) shall be collected in a 30- or 55-gallon drum at the shop. Affix “USED OIL” and “HOLD FOR TEST RESULTS” stickers to the drum, and contact the Environmental Office at (210) 698-5208 to arrange for testing.



Figure 1 - Example USED OIL label.



Figure 2 - Example USED FILTERS label.

**HOLD FOR
TEST
RESULTS**

Write the date the
sample was collected
for analysis.

Figure 3 - Example HOLD FOR TEST RESULTS label.

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Procedure: Handling of Used Antifreeze		
Document ID: SOP-011		
Document Owner:	Approval:	Revision: 1 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

1.0 PURPOSE

Provide a standard operating procedure (SOP) for Camp Stanley Storage Activity (CSSA) personnel managing used antifreeze. This SOP incorporates requirements stipulated by the Spill Prevention, Control, and Countermeasure Plan (SPCC) adopted by Camp Stanley Storage Activity (CSSA).

2.0 APPLICABILITY

This SOP applies to all Shops/activities that generate used antifreeze.

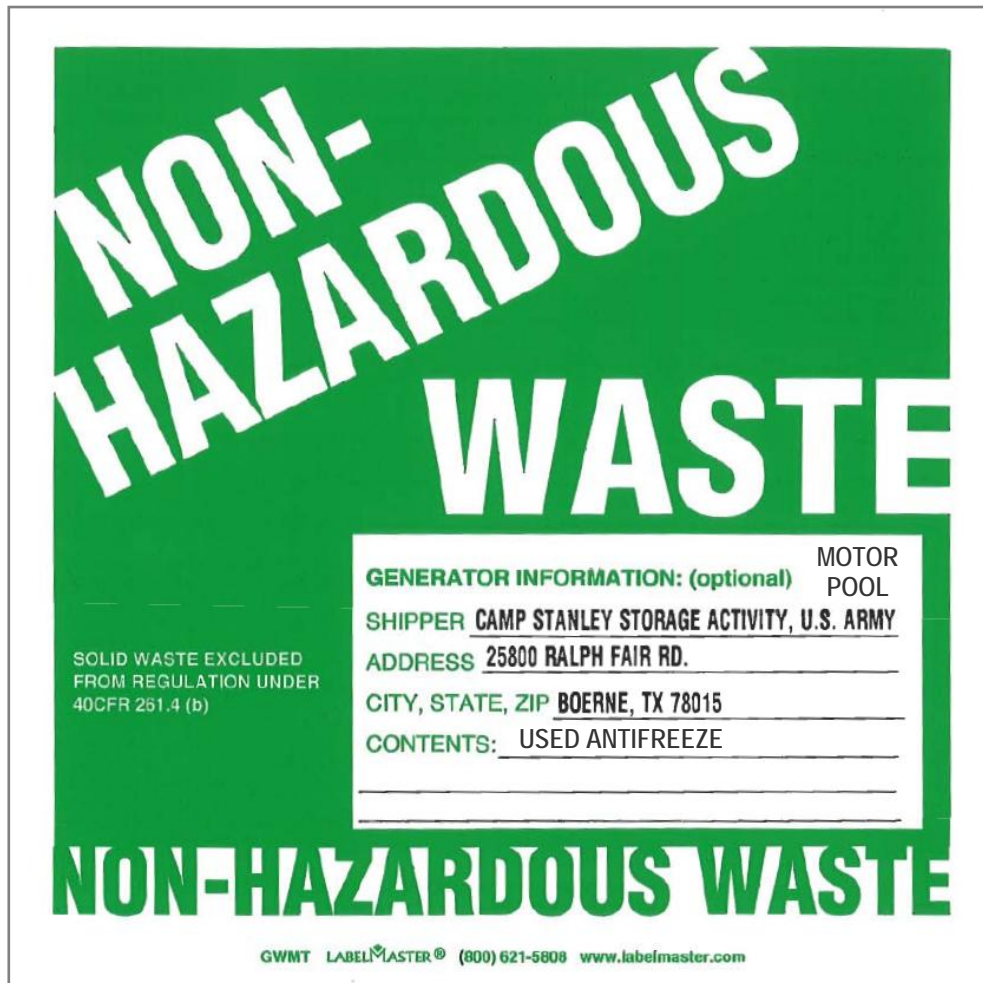
3.0 PROCESS

(USED ANTIFREEZE IS NOT TO BE DISPOSED OF DOWN ANY DRAIN OR CATCH BASIN)

Used antifreeze is currently not classified as either a hazardous waste or a universal waste. Although classified as non-hazardous, used antifreeze shall not be placed in the regular trash or dumped down the drain, or catch basin. When used antifreeze requires disposal, the following procedures shall be followed:

1. When changing antifreeze, ensure that no spills occur and the antifreeze is drained into dedicated containers using a funnel and rags. All antifreeze changes must occur over a solid surface away from any unprotected floor drains.
2. Immediately transfer used antifreeze to the used antifreeze 55-gallon drum located in the storage area outside the Motor Pool (Bldg 4).
3. Ensure the top of the used antifreeze drum remains closed at all times unless a transfer of used antifreeze is occurring.

4. Ensure that the used antifreeze collection tank is always labeled using a Non-Hazardous Waste label and the words "USED ANTIFREEZE" for the CONTENTS. The Shop name should also be indicated on the label (see example below).
5. Document any releases of used antifreeze and associated cleanup activities by contacting the Environmental Office at (210) 698-5208.
6. Used antifreeze will be collected by a contractor for offsite recycling.
7. Contact the Environmental Office at (210) 698-5208 to arrange for disposal if the storage drum reaches $\frac{3}{4}$ of the container capacity.



Procedure: Handling of Used Gasoline and Used Fuel Filters		
Document ID: EMS SOP-012		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

1.0 PURPOSE

This standard operation procedure (SOP) sets forth the requirements for handling used gasoline and used fuel filters at Camp Stanley Storage Activity (CSSA).

2.0 APPLICABILITY

This SOP applies to Motor Pool (Bldg 4) personnel who drain used gasoline and other used petroleum fuel products, such as diesel, from vehicles.

3.0 PROCESS

Motor Pool personnel drain gasoline from vehicles into an approved container, and then transferred to a 55-gallon container, which is placed in secondary storage in a locked area outside Bldg 4. The used gasoline is stored here until it is needed as fuel for prescribed burns at CSSA or transported off-post by a contractor.

Used Gasoline

After the gasoline has drained from the vehicle, transfer it into a 55-gallon steel container

- 1) Obtain a non-removable head container with a serviceable bung cap, which has a rubber gasket that can be properly screwed into the container opening.
- 2) Check each empty container for leaks, rust, and dents. If the container is damaged do not accept or use it.
- 3) Properly check each empty container for the type of material it will be used to store, for example use for liquid or solid waste storage. If the proper container is not used, do not accept the container until transfer of contents has been made.
- 4) Transfer the used gasoline into the approved container and properly screw the cap into the container opening securely.

- 5) Label the container with a “USED FUEL” label (see example label below). **Do not label the container with a Non-Hazardous Waste label.**

Storage building located outside Bldg 4 for storing the used gasoline.

Note: The storage building must be marked with a flammable liquid sign.

- 1) Ensure all used gasoline containers in the storage building are labeled properly with a “USED FUEL” label.
- 2) During storage used gasoline must have a 4-inch head space, which is the amount of space between the liquid and the top of the container.
- 3) Keep all containers closed.

Used Fuel Filters

1. Used fuel filters will be allowed to drain into a used gasoline collection container prior to disposal.
2. Allow used fuel filters to drain until all free flowing gasoline has been allowed to drain from the filter. Handle collected used gasoline as described above. Once drained, the used fuel filter should be crushed.
3. Place drained fuel filters into the dedicated fuel filter storage drum outside the Motor Pool at Bldg 4.
4. Ensure that the used fuel filter container is labeled with a “USED FILTERS – FUEL” label.
5. Used fuel filters will be collected by a contractor for offsite recycling.
6. Contact the Environmental Office at (210) 698-5208 to arrange for disposal if the storage container reaches $\frac{3}{4}$ of the container capacity.

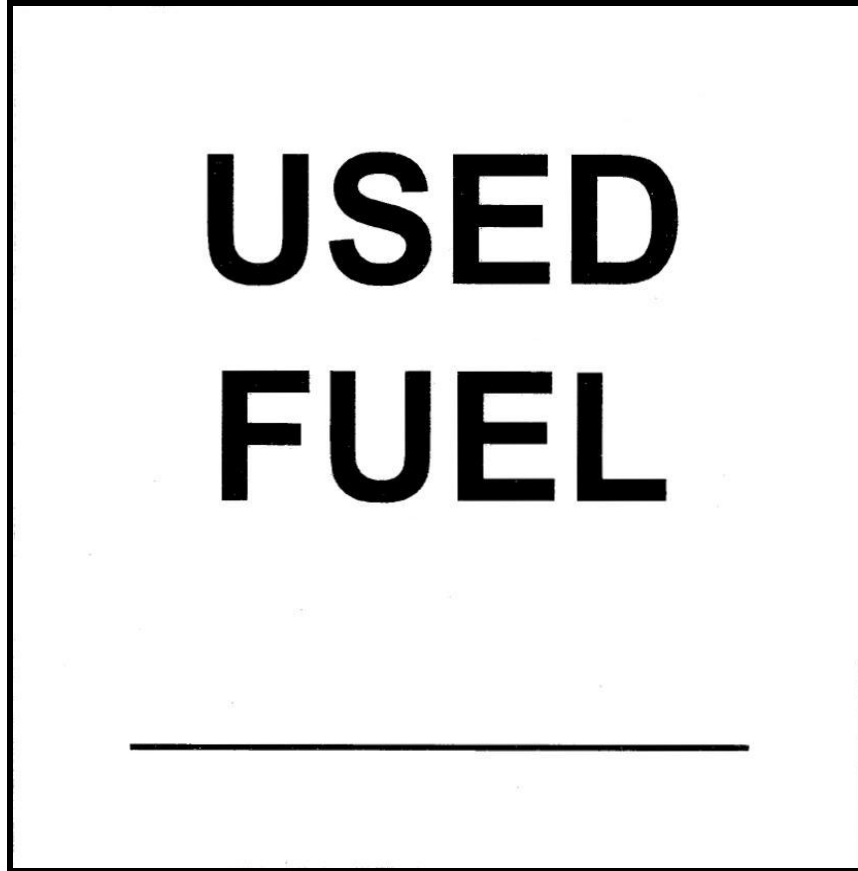


Figure 1 - Example USED FUEL label.



Clearly indicate on the label that the container holds used fuel filters.

Figure 2 - Example USED FILTERS label.

Procedure: Labeling and Marking of Nonhazardous Waste Containers		
Document ID: SOP-013		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

To provide a standard operating procedure (SOP) for Camp Stanley Storage Activity (CSSA) personnel labeling and marking of nonhazardous waste containers.

APPLICABILITY

This SOP is applicable to the labeling and marking of nonhazardous waste containers.

PROCESS

Each shop will place a warning label on each container used for nonhazardous waste collection.

The following information must be placed on the nonhazardous waste label (all entries shall be made in indelible marker):

1. SHIPPER (include Shop Name).
2. CONTENTS (See Table 1 in Shop Waste Management Plan).

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE

SOLID WASTE EXCLUDED FROM REGULATION UNDER 40CFR 261.4 (b)

GENERATOR INFORMATION: (optional) *SHOP NAME*

SHIPPER CAMP STANLEY STORAGE ACTIVITY, U.S. ARMY

ADDRESS 25800 RALPH FAIR RD.

CITY, STATE, ZIP BOERNE, TX 78015

CONTENTS: LIST TYPE OF WASTE (see below)

GWMT LABELMASTER® (800) 621-5808 www.labelmaster.com

Write the Shop name somewhere on the label.

Possible types of Non-hazardous Waste to be entered on the container label:

1. Used Antifreeze
2. Used Absorbant
3. Used Abrasives

If you have an item that is not included on the above list, contact the Environmental Department for proper labeling or disposal procedures.

Procedure: Oil-based Paint Brush Cleaning		
Document ID: SOP-014		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

To provide a Standard Operating Procedure (SOP) for the removal of oil-based coatings (i.e., paints, stains, etc.) from brushes.

APPLICABILITY

This SOP is applicable to the removal of oil-based coatings (i.e., paints, stains, etc.) from brushes. The resultant wastes generated in this process are managed as Universal Waste (paint and paint-related waste) as described in 30 TAC 335.262(b).

Note: The processes and wastes from cleaning brushes of latex coatings shall be kept separate from those for oil-based brushes. See SOP-015 for the procedure to clean brushes of latex coatings.

PROCESS

Brush Cleaning

- Brushes shall be soaked in the appropriate solvent (e.g. mineral spirits, turpentine, etc.) in order to remove the coating material (i.e., paint, stain, etc.).
- The amount of time needed for soaking shall be determined by the operator based upon his/her knowledge and experience. When as much material as possible has been removed by soaking in solvent, the paint brush shall be washed thoroughly with soap and water and allowed to dry. After drying, the brush may be used again.

Soaking Containers

- The containers used to soak paint brushes shall be:
 - Open-topped;
 - Less than 2 gallons in capacity

- Be constructed of material compatible with the solvent (typically metal), and
 - In good condition (e.g., not corroded, no leaks, etc.),
2. Applicable Shops shall maintain only one operating soaking container of each needed solvent at any one time. Each soaking container shall be clearly marked with the type of solvent.

Disposal

1. The solvents in the soaking containers may be used repeatedly to clean brushes. As such, the solvents will not become wastes after cleaning just one brush. The usability of the solvent in the soaking containers shall be determined by the operator based upon his/her knowledge and experience.
2. When the operator has determined the solvent is no longer usable, he/she will contact the Environmental Office at (210) 698-5208 of the need to manage Universal Paint and Paint-Related Waste.
3. The used solvent shall be place in a paint and paint-related waste collection drum at the HAZMART designated container and properly labels with a Universal Waste label (example provided below).

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(IES)

UNIVERSAL WASTE - MERCURY THERMOSTAT(S)

UNIVERSAL WASTE - MERCURY CONTAINING EQUIPMENT

UNIVERSAL WASTE - PESTICIDE(S)

UNIVERSAL WASTE - LAMP(S)

Shop Name

ACCUMULATION START DATE: _____

Paint and paint-related waste

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX
(REQUIRED DURING TRANSPORT, WHEN MATERIAL IS ALSO
REGULATED BY 49CFR PARTS 172-180)

HANDLE WITH CARE!

Style UW05T © 2005 LABELMASTER® (800) 621-5808 www.labelmaster.com

Indicate paint and paint-related waste on the label.

Write the Shop name somewhere on the label.

Procedure: Latex, Water-Based Paint Brush Cleaning		
Document ID: SOP-015		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

Provide a standard procedure for the removal of latex, water-based paints from brushes.

APPLICABILITY

This SOP is applicable to the removal of latex, water-based paints from brushes. The brushes with latex coatings may be cleaned with water and the resultant wastes generated are not hazardous wastes. As such, the processes and wastes from the cleaning of brushes with latex coatings shall be separated from those generated by oil-based laden brushes.

PROCESS

Note: Always wear safety glasses when cleaning paint brushes to avoid eye contact.

Latex, Water-based paint Brush Cleaning

1. Shop personnel shall try to minimize waste when disposing of latex, water-based paint laden brushes and shall try to use as much of the paint on the job as possible.
2. Remove excess latex paint from the paint brush by brushing along cardboard or newspaper.
3. The latex, water-based paint brushes may be cleaned in the sink.
4. Latex, water-based paint brushes shall be cleaned immediately using soap (preferably tri-sodium phosphate [TSP]) and water after use, so that the paint does not dry onto the brush.
5. The cleaned paint brush shall be rinsed thoroughly in clean water.

6. After rinsing, gently pull back the paint brush bristles into shape.
7. Hang the paint brush on a hook and allow it to dry properly.
8. Reshape the paint brush by replacing it in its packaging if available.
9. Store the dried paint brush in a sealed plastic bag in a dry place for reuse.
10. The latex, water-based paint waste is not a hazardous waste and may be rinsed down the drain in moderation, so as to not clog the drain.
11. Do not pour waste paint on the ground.

Procedure: Spent Small Arms Ammunition Cartridge Management		
Document ID: SOP-016		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 14 Sept 10

1.0 PURPOSE

This document provides a standard procedure for the Camp Stanley Storage Activity (CSSA) spent small arms ammunition cartridge management. Small arms ammunition are defined as items smaller than 50 caliber. The small arms cartridges are segregated by type and sent to appropriate recycling facility for proper reuse of recycling.

2.0 APPLICABILITY

This Standard Operating Procedure (SOP) applies to all CSSA activities that generate small arms casings.

3.0 PROCESS

The following is a description of CSSA management and handling procedures.

Spent Small Arms Ammunition Cartridges

Fired brass (small arms: 7.62mm, 5.56mm, 9mm, etc.) will be segregated by type and will be free of all foreign substances, such as steel clips, links, sand, and dirt.

(1) All brass will be kept within appropriate labeled containers at the range(s) or within Building 90 until containers are full at which time will be turned over to Munitions Storage Maintenance Branch (MSMB) Personnel for inspection and turn in to the Defense Logistics Agency (DLA). Brass from test fires at the indoor range adjacent to Building 44 will be collected upon completion of firing and turned in to MSMB Personnel.

(2) MSMB Personnel will transport brass to Building 45 for temporary storage until an inspection by certified personnel can be conducted.

(3) Turn in of all brass to DLA will be done on DD 1348's with the following statement and

signature of the inspecting individual hand written on it in the remark blocks:

“I certify that the above listed items are free of any and all explosive residue per my inspection on (date).”

(4) All quantities on the DD 1348's will be written in pounds, not by number of shell casings turned in. All markings or lettering on the outside of empty containers must be obliterated and the container marked as empty except if the container is to be used later to reissue ammunition. MSMB Personnel have a designated storage area for all containers that are to be used at a later date. The container must be completely marked out with Black paint and kept in the designated storage area. If empty ammunition containers are going to DLA, the following is required:

(1) All markings of lettering on the outside of the container must be obliterated and the container marked as empty. Empty containers that are subject to turn-in to DLA will be marked by affixing a weather resistant placard or tag stenciled with the word “EMPTY” in approximately 1-inch letters. Palletized containers will be marked with the word “EMPTY” on at least one side of the pallet. Each ammunition container that is not palletized will be marked individually with a tag or placard with the word “EMPTY” on it.

(2) Munitions containers will have all explosive residue and rounds removed. Plastic and cardboard must be removed from these containers and all hazardous markings must be obliterated and the container marked as empty.

(3) All ammunition containers will not be used for any other purpose except storage of ammunition, until the container has been inspected and marked by certified personnel.

(4) High-dollar value containers (aviation ordnance containers, copperhead cans, etc.) will be returned to the MSMB. All hazardous markings are to be obliterated and the container marked as empty.



Spent Shot Gun Shell Casings Label

Procedure: Management of Air Pollution Control Filters from Munitions Range Activity		
Document ID: SOP-017		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

To provide a standard operating procedure (SOP) for Camp Stanley Storage Activity (CSSA) personnel managing filters generated from air pollution control (APC) devices on indoor weapons and ammunition testing facilities. This includes the filters generated at weapons testing facility in Bldg. 90 Test Fire Room and the quick range near Bldg. 44 used to test ammunition.

APPLICABILITY

This SOP is applicable to the management of filters as recyclable metal.

PROCESS

CSSA’s Environmental Shop is responsible for managing the used air filters generated from ammunition and weapons testing facilities. The recyclable metals generated from the APC units are defined as “sludge” by 30 Texas Administrative Code (TAC) section 335.17(2)/ section 336.003 Texas Health and Safety Code. Therefore the APC filters are exempt from being a solid waste when reclaimed pursuant to 30 TAC section 335.1(131)(D)(iii). The used filters are managed in supplied Carboys from ECS Refining located in Terrell, Texas. Recyclable metal containers will have a “scrap metal for recycling” label on each container used for metals recycling collection (see example below).

SCRAP METAL FOR RECYCLING

Procedure: Used Abrasives		
Document ID: SOP-018		
Document Owner:	Approval:	Revision: 1 Revision Date: 06 Jan 2010
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

To provide a standard operating procedure (SOP) for Camp Stanley Storage Activity (CSSA) personnel managing used abrasives generated from grit blasting operations. This includes the abrasives generated at the Operations and Maintenance Branch at Bldg. 90 and the Motor Pool at Bldg 4.

APPLICABILITY

This SOP is applicable to the management of used abrasives from grit-blasting activities.

PROCESS

1. Following grit-blasting activities, used abrasives should be stored in a 55-gallon drum at either a waste accumulation point inside Bldg 90, or in the waste storage area outside Bldg 4 (if generated at the Motor Pool).
2. When the first material is placed in the empty drum, affix a NON-HAZARDOUS WASTE label to the outside of the drum and label the contents as USED ABRASIVES.
3. When the drum is $\frac{3}{4}$, contact the Environmental Office at (210) 698-5208 to arrange for transfer of the drum to the Bldg 86 waste storage area.
4. The contents of the drum will be analyzed by a laboratory prior to disposal off-post by a contractor. Below the NON-HAZARDOUS WASTE label, affix a HOLD FOR TEST RESULTS label (see examples below).

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE

SOLID WASTE EXCLUDED FROM REGULATION UNDER 40CFR 251.4 (b)

GENERATOR INFORMATION: (optional) **SHOP NAME**

SHIPPER CAMP STANLEY STORAGE ACTIVITY, U.S. ARMY

ADDRESS 25800 RALPH FAIR RD.

CITY, STATE, ZIP BOERNE, TX 78015

CONTENTS: USED ABRASIVES

GWMT LABELMASTER® (800) 621-5808 www.labelmaster.com

Write the Shop name somewhere on the label.

HOLD FOR TEST RESULTS

Write the date the sample was collected for analysis.

Procedure: Regulated Asbestos-Containing Material		
Document ID: SOP-019		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 01 June 2009

PURPOSE

To provide a standard operating procedure (SOP) for Camp Stanley Storage Activity (CSSA) personnel managing regulated asbestos-containing materials (RACM) defined by Chapter 40 Code of Federal Regulations (CFR) Part 61 and Texas Administrative Code (TAC) Section 335.508 as a Class 1 non-hazardous waste.

APPLICABILITY

This SOP is applicable to the management of RACM.

PROCESS

If asbestos is encountered or suspected at any CSSA facility, notify the Environmental Department immediately at (210) 698-5208. **DO NOT TOUCH OR ATTEMPT TO REMOVE THE MATERIAL YOURSELF.** All asbestos at CSSA will be handled according to TAC Section 335.508 and disposed of by a licensed contractor.

Procedure: Management of Waste Water from Water-jet Cutter and Citrus-based Solvent Washers		
Document ID: SOP-020		
Document Owner:	Approval:	Revision: 0 Revision Date: NA
EMS Management Representative	Environmental Manager	Original Date: 14 Sept 2010

1.0 PURPOSE

This document provides a standard procedure for managing waste water from the water-jet cutter and citrus-based solvent washers at Camp Stanley Storage Activity (CSSA) Building 90.

2.0 APPLICABILITY

This SOP applies to all CSSA operations that use water-jet cutters or citrus-based solvent parts washers.

3.0 PROCESS

CSSA personnel will remove the waste water from the water-jet or parts washer, collect it in an appropriate container in a satellite accumulation area at Building 90, transport it to the Bldg 86 waste storage area, and notify the Environmental Office. The Environmental Office will ensure that the residual material is tested for metals content prior to shipment off-post. A HOLD FOR TEST RESULTS label (see example on back page) should be affixed to the storage drum.

HOLD FOR TEST RESULTS

Write the date the
sample was collected
for analysis.