

HAZARDOUS WASTE MANAGEMENT PLAN

**FORT STEWART/HUNTER ARMY AIRFIELD
GEORGIA**



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U.S. Army Center for Health Promotion and Preventive Medicine
Hazardous and Medical Waste Program
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Record of Changes

This Record of Changes is used to record changes or revisions to this plan, the date of the change, page number, and section number, as well as a brief description of the changes made.

Page	Section	Date	Description
all	all	13 May 09	Comprehensive revision of 2010 Hazardous Waste Management Plan by USACHPPM.
all	all	9 July 09	Comprehensive staffing and editing of draft plan.
all	all	23 Sept 09	DPW-ENV staffing revisions.
all	all	9 Feb 10	Final revisions after EPAS
all	all	28 Nov 11	Changes “SAPs” to “UPPs and SAPs”
9-9	9.16	27 Jun 12	Changes Bullet #4 to a “Universal Waste” label
9-9	9.16	27 Jun 12	Adds Bullet #6: to address Best Management Practices (BMPs) for Lamp replacement at Unit level as follows: Contact TFW work order section @ 767-2883 for replacement of Lamps or in the case of utilizing the “Self Help Shop” they will do a one for one replacement. NO EXCEPTIONS!
3-7	3.10	7 Sep 12	Changes “2LT or WO1” to “Sergeant First Class (SFC)”
all	all	3 Dec 13	Adds “Jet-A/F-24” adjacent to JP8 entries
8-2	8.3	9 Sep14	Removes “With the exception of other (synthetic-based) used POL products, used oil” to “All used oil including other (synthetic-based) used POL products”

Page	Section	Date	Description
8-2	8.4	9 Sep 14	Removes all after “closed-head polypropylene 55-gallon.....” to “Above Ground Storage Tanks (ASTs)”
9-17	9.31	3 Jun 14	Changes section 9.31 in its entirety to “Tires generated from Fort Stewart or Hunter Army Air Field for disposal is only accepted for turn-in at Defense Logistics Agency (DLA) Disposition Services. This category includes tires generated from all tactical vehicles, special purpose wheeled vehicles such as construction equipment, and commercial type vehicles. Contact DLA disposition services (Bldg. 1152) at 767-4638/2779 for proper procedures for proper turn-in procedures”
9-18	9.32	2 Dec 14	Changes section 9.32 in its entirety from “Used Triple-Rinse Solution” to “Drain Table Operations” and “Used triple rinse solution is no longer used as a cleaning agent/solution to clean empty containers and is noted that in lieu of the triple rinse stations FS/HAAF will/have implemented the use of drain tables, which is an acceptable practice/standard
8-2	8.3	22 Feb 16	Adds “and will be inspected monthly by the assigned Environmental Assessor using Form 6 in the SPCC Plan.”
7-5	7.4	22 Feb 16	Removes “HW Manager” when used in the capacity as an assessor to “assigned Environmental Assessor”
7-5	7.4	24 Feb 16	Adds to Bullet #5: The generator must mark the container holding the <u>excess</u> accumulation of HW with the date the excess amount began accumulated (40 CFR 262.34) however, generator must be diligent not to exceed the 55 gallon accumulation and will conduct a HW turn-in procedure to avoid the excess. Installation’s normal practice is no more than 55 gallons of HW accumulated.
15-4	15.3.2	14 Apr 16	Adds “ NOTE***Assigned environmental compliance assessor will review their unit/activity’s current status on the required annual HM/HW Handlers Course training at the end of every 4th quarter of the fiscal year. ”
all	all	16 Jun 16	Removes the word “Material” from “Material Safety Data Sheets” and removes “MSDS” to “SDS”

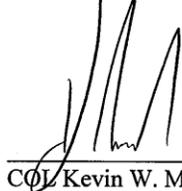
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HAZARDOUS WASTE MANAGEMENT PLAN

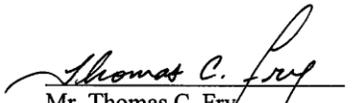
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CHAPTER 1 INTRODUCTION

This chapter outlines the purpose and requirements of the Fort Stewart/Hunter Army Airfield (FS/HAAF) Hazardous Waste Management Plan (HWMP).

1.1 Purpose and Requirement

The Fort Stewart Directorate of Public Works (DPW) Environmental Division, herein after referred to as the Installation Environmental Coordinator (IEC), manages the FS/HAAF environmental program and oversees the environmental program for the tenant organizations located on FS/HAAF. The HWMP is a document developed for FS/HAAF and provides guidance to all personnel who work with hazardous waste (HW). The HWMP is intended to provide a basic understanding of the hazards and techniques associated with the handling of hazardous materials (HM) and HW so that personnel will be better able to protect their personal health, prevent damage to the environment, and comply with applicable laws, regulations and policies. This plan incorporates regulatory HW requirements by the Environmental Protection Agency (EPA), Department of Transportation (DOT), Georgia Environmental Protection Division (GAEPD), Department of Defense (DOD), Army, and local regulations. The Defense Reutilization and Marketing Office (DRMO) will be used as the HW disposal agent; therefore, the plan incorporates the HW turn-in requirements of DOD 4160.21-M, Defense Materiel Disposition Manual.

This plan will be provided to all installation personnel, including tenants that generate, transport, treat, store, or dispose of HW. This plan will be kept current to reflect changes in regulatory requirements or waste generating activities at FS/HAAF. At a minimum, this plan will be reviewed annually by the IEC and updated as needed.

1.2 Applicably

The HWMP applies to all units/activities/tenants located on FS/HAAF. All military, civilian, and contract personnel working at FS/HAAF properties are subject to the policies outlined in this HWMP. Activities will incorporate these policies into their standard operating procedures (SOP).

1.3 FS/HAAF Environmental Policy

The FS/HAAF Environmental Policy underscores the Commander's commitment to prevent pollution, conserve natural resources, comply with federal, state and local laws and regulations, and strive to continually improve environmental stewardship. FS/HAAF is committed to simultaneously optimizing performance of the mission, well-being of soldiers, family members and the surrounding communities, and impact on the environment.

Units/activities are responsible for ensuring that environmental accountability is integrated into day-to-day decision-making and long-term planning processes, across all missions, activities,

and functions. A Sustainable Management System (SMS) has been developed at FS/HAAF to establish strategies that support environmental leadership programs, policies, and procedures and to ensure that unit/activity leaders actively endorse these strategies. It includes organizational structures, planning activities, responsibilities, processes, resources, and provisions for developing, implementing, maintaining, reviewing, and continually improving the integration of environmental accountability into Army missions.

1.4 Fines and Violations

The Installation Commander is considered to be the “owner/operator” of FS/HAAF HW generating facilities and is responsible for all violations that occur on FS/HAAF properties. Violations may be punishable by fines, injunctions, and in some cases, imprisonment. Activities that generate waste are held accountable for proper handling and management of HW in accordance with (IAW) applicable Federal, Georgia (GA), Army, and Fort Stewart regulations. It is the IEC’s mission to assist HW generators in properly managing their waste streams.

1.5 Army’s Waste Management Program

The primary goal of the Army’s Waste Management Program is to “*continually reduce the volume of HW generated by Army Installations, and maintain compliance with pertinent HW regulations.*” The following Army policies have been stipulated in AR 200-1, Chapter 10, Waste Management:

1. Hazardous waste disposal costs are those costs associated with the collection, treatment, storage, transportation and disposal of hazardous wastes. This includes all Defense Reutilization and Marketing Service (DRMS) costs directly related to the packaging and offsite shipment of the wastes. It does not include the disposal of special wastes defined as non-hazardous unless otherwise defined as hazardous by State and local regulations, or country-specific Final Governing Standards (FGS); asbestos, chemical and biological agent waste; radioactive waste; and regulated medical wastes (RMW).
 - a. Garrisons must directly charge or seek reimbursement from non-Army tenants and activities funded through an operating fund, a procurement fund, a research and development fund, and other DOD funded activities. Though appropriated funds can be used for a non-appropriated fund activity, it is subject to the availability of funds of HQ, IMCOM.
 - b. Hazardous wastes generated under service, facility, maintenance or construction contracts should not be a separate cost and funded as part of the original contract.
 - c. The Garrison environmental office will be considered the generator, for funding purposes, of orphan wastes found on post, and wastes from a household hazardous waste collection program.
2. Comply with all applicable Federal, State, and local HW regulations, and FGS.

3. Effectively manage HW and reduce its generation.
4. Minimize the need for Army-owned or operated permitted HW treatment, storage, and disposal facilities.
5. Minimize HW generation through pollution prevention actions, for example, source reduction, material substitution, and recycling/reuse. Where cost effective and timely, implement pollution prevention solutions to reduce or eliminate compliance requirements.
6. Prohibit the storage of HW in underground storage tanks (USTs), except where allowed by FGS.

1.6 Army's Hazardous Material Management Program

The primary goal of the Army's Hazardous Material Management Program (HMMP) is to *"reduce risk to public health and the environment by employing management controls and pollution prevention initiatives to comply with regulations and executive orders and to support sustainability."* The following Army policies have been stipulated in AR 200-1, Chapter 9, Materials Management:

1. Follow approved standardized HM management business practices as specified by the Deputy Chief of Staff, G-4 and the Office of the Assistant Chief of Staff for Installation Management (OACSIM) to implement the HMMP.
2. Review and approve HM usage and track usage to using processes and work centers.
3. Reduce the acquisition and use of HM and the generation of solid or HW through centralized inventory control, best management practices, pollution prevention actions, improved procurement practices, material re-use, recycling, and enhanced shelf-life management. HM should be procured through the standard Army supply system. Use of government IMPAC credit cards to purchase HM is generally prohibited, and may only be allowed on a case-by-case basis by Garrison Commanders or the designated representative.
4. Manage and dispose of pesticides, residues, and their containers in an environmentally safe manner.
5. Do not allow the transport, storage, or disposal of non-DOD HM on Army Installations unless approved by the Office of the Assistant Secretary of the Army for Installations and Environment (OASA (I&E)), his or his designee, or higher authority.

1.7 FS/HAAF Hazardous Waste Minimization (HAZMIN) Goal

FS/HAAF advocates a clean environment. The primary goal is to minimize the generation of hazardous waste and non-hazardous solid wastes and, in so far as possible, and to eliminate

pollution at the front end of the waste stream. FS/HAAF works to accomplish its mission within the legal requirements and also strives to achieve compliance above the standards by proactively working to protect and when possible enhance the quality of the environment.

Short Term Goals – Identify the top five processes that produce hazardous waste and reduce hazardous waste produced by 10% in each of these processes.

Long Term Goals – Training is the keystone to achieve further HAZMIN goals. In order to achieve greater HAZMIN increase the number of personnel trained in hazardous waste and hazardous material management by 2% each year.

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CHAPTER 2

REGULATIONS, DIRECTIVES, AND REFERENCES

This chapter provides brief summaries of the major laws and regulatory requirements impacting the management of HW at FS/HAAF. Due to the wide-reaching nature of HM and HW issues and frequent changes to laws and regulations, this chapter is not intended to be all-inclusive.

2.1 Federal Regulations

2.1.1 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 as an amendment to the Solid Waste Disposal Act. The primary objectives of RCRA, found in the Code of Federal (CFR) Regulations Title 40, are to protect human health and the environment and conserve valuable material and energy resources. The most important aspect of RCRA is its establishment of “cradle-to-grave” management and tracking of HW from generator to transporter to treatment, storage, and disposal. Other aspects of RCRA include the development of solid waste (SW) management plans; prohibition of open dumping; encouragement of recycling, reuse, and treatment of HW; establishment of guidelines for SW management; and promotion of beneficial SW management, resource recovery, and resource conservation systems.

2.1.2 Hazardous and Solid Waste Amendments

The Hazardous and Solid Waste Amendments (HSWA), enacted in 1984, reauthorized and amended RCRA and imposed new and far-reaching requirements for the management of HW. The amendments established programs to regulate small quantity generators of HW (between 100 and 1,000 kg of waste/month), restricted land disposal of HW, established minimum technology requirements for land disposal units, required corrective actions for releases of HW, regulated underground storage tanks (USTs) containing petroleum products or hazardous substances, initiated listing of new materials as HW, and set deadlines for the EPA to issue or deny HW facility operating permits.

2.1.3 Occupational Safety and Health Act

The Occupational Safety and Health Administration or OSHA defines standards for proper HM management in 29 CFR. These standards are designed to protect workers who are exposed to hazardous chemicals and materials during their employment. They were originally defined and instituted under the Occupational Safety and Health Act (OSH Act) of 1970 and today remain, as they were when they were adopted. All of the standards are aimed at reducing workplace injuries to promote a safer work environment for all places of employment within the US.

The OSHA Hazard Communication standard (HAZCOM) is probably one of the most significant occupational safety and health standards ever adopted. Its purpose is to alert employees to dangerous substances in the workplace and the proper means and methods by which that employee should protect themselves.

2.1.4 Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) was passed in 1986 and enacted as a freestanding provision of the Superfund Amendments and Reauthorization Act (SARA). It provides state and local governments' information concerning possible chemical hazards in the community. It requires emergency planning for release of extremely hazardous substances. The act allows for citizens' suit, criminal sanctions, and severe penalties for even minor releases of these extremely hazardous substances into the environment.

2.1.5 Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The SARA of 1986 amended this act. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and SARA regulate prevention, control, and compensation of environmental pollution. This act is commonly referred to as "Superfund" and regulates the cleanup of contaminated HW sites and releases of hazardous substances into the environment. The CERCLA list of hazardous substances is published in 40 CFR Part 302 and in 49 CFR Part 172.101, Appendix A. The Defense Environmental Restoration Program is the DOD program that implements CERCLA.

2.1.6 Pollution Prevention Act of 1990

The Pollution Prevention Act establishes that it is the policy of the United States that, whenever feasible, pollution should be prevented or reduced at the source. It states that pollution, which cannot be prevented, should be recycled in an environmentally safe manner; that pollution that cannot be prevented or recycled should be treated in an environmentally safe manner; and that disposal or other release into the environment of waste should be employed only as a last resort, and should be done in an environmentally safe manner.

2.1.7 The Federal Facilities Compliance Act of 1992

This act provides for a waiver of sovereign immunity with respect to Federal, State, and local procedural and substantive requirements of RCRA solid and HW laws and regulations. Additionally, it defines HW in relation to public vessels, expands the definition of mixed waste, addresses the issue of munitions, and discusses waste discharges to federally owned treatment works.

2.1.8 National Environmental Policy Act

The National Environmental Policy Act or NEPA was passed in 1970. It requires all Federal agencies to consider environmental effects of proposed actions in their planning and decision-making. Federal agencies must prepare detailed statements on environmental considerations and

recommendations for major Federal actions that significantly affect the quality of the human environment.

2.1.9 Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act was passed in 1975 and amended in 1990 by the Hazardous Materials Transportation Uniform Safety Act. It details the requirements for safe transport of HM and their wastes by all modes of transport—air, water, rail, highway and pipeline. It also establishes a systematic way to track materials during transport and establishes certain packaging, labeling and communication requirements. Enforcement of the act is delegated by the Secretary of the Department of Transportation; standards for the proper transportation of HM are found in 49 CFR.

2.1.10 Toxic Substances Control Act

The Toxic Substances Control Act or TSCA was passed in 1976. It requires the testing of chemical substances, both new and old, entering the environment and to regulate them as necessary. This Act supplements sections of other laws affecting substances such as Section 112 of the Clean Air Act, Section 307 of the Clean Water Act, and Section 6 of the OSH Act.

2.1.11 Presidential Executive Order 13423, “Strengthening Federal Environmental, Energy, and Transportation Management,” January 2007

This Executive Order (EO) sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reduction, recycling, sustainable buildings, electronics stewardship, fleets, water conservation and stormwater protection. It requires Federal agencies to lead by example in advancing the nation’s energy security and environmental performance. It also requires use of EMS as the framework for managing and continually improving sustainable practices. The EO consolidates five prior EOs (13101, 13123, 13134, 13148, and 13149) and integrates the sustainable practices of those orders into a more cohesive approach for environmental and energy management.

2.2 Georgia Regulations

In Georgia, HW is regulated by the Georgia Hazardous Waste Management Act of 1980 and the Georgia Comprehensive Solid Waste Management Act of 1990. Regulations for implementing these acts are found in Chapter 391-3-11, Hazardous Waste Management, and Chapter 391-3-4, Solid Waste Management, of the Rules of the Georgia Department of Natural Resources, Environmental Protection Division. The Georgia HW regulations are similar and essentially equivalent to the RCRA HW regulations. The Director of the Georgia Environmental Protection Division (GAEPD) has responsibility for developing and maintaining the state comprehensive plan and assuring that Georgia is in compliance with the federal act.

2.3 Army Regulations

2.3.1 Army Regulation 200-1, Environmental Protection and Enhancement

Army Regulation (AR) 200-1 establishes policies and procedures to protect and preserve the quality of the environment. It outlines environmental responsibilities for the Department of the Army (DA), major commands, and installations. It also defines the Army's goal of continually reducing the generation of HW and procedures for managing those wastes, including waste identification, records management, waste disposal, and training programs.

2.3.2 DA Pamphlet 200-1, Environmental Protection and Enhancement

DA Pamphlet (PAM) 200-1 supplements AR 200-1 with specific requirements on how to implement and manage the Army's environmental programs. This pamphlet explains detailed procedures and methodology to be followed in preserving, protecting, and restoring environmental quality in accordance with AR 200-1. The pamphlet applies to the Active Army, the Army National Guard and the U.S. Army Reserve. It also applies to tenants, contractors, and lessees performing functions on real property under the jurisdiction of the Department of the Army; and contracts to operate Government-owned facilities.

2.4 DOD Instructions, Directives, etc.

2.4.1 DOD Memorandum, "Revised Pollution Prevention and Compliance Metrics," 12 October 2004

This memorandum establishes DOD compliance metrics to measure progress in the P2 and compliance programs in support of the defense mission. Each environmental program area has a set of broad overall goals with specific metrics to measure DOD's progress towards meeting these goals. The P2 and compliance programs focus on enhancing and sustaining the mission by supporting the warfighter today and in the future, ensuring adequate resource capability for the warfighter, improving human health and the environment, influencing the acquisition and weapon system life-cycle process, making efficient investments in P2, and conducting operations in a cost-effective manner.

2.4.2 DOD Instruction 4715.6, "Environmental Compliance," 24 April 1996

This document implements policy, assigns responsibility, and prescribes procedures as established for achieving compliance with applicable EOs, Federal, state, inter-state, regional, and local statutory and regulatory environmental requirements.

2.4.3 DOD 4160.21-M, "Defense Materiel Disposition Manual," August 1997

This regulation provides DOD Installations and Defense Logistics Agency personnel with guidance on handling, processing, and disposing of DOD excess and surplus which may be hazardous to human health and the environment. These types of property are normally regulated under Federal or state environmental and safety laws, or other applicable laws and regulations; and overseas, by the DOD Executive Agent's Final Governing Standards (FGS), for the host nation, or the DOD Overseas Environmental Baseline Guidance Document, where no FGS exists.

2.4.4 DOD 4500.9-R, “Defense Transportation Regulation, Cargo Movement,” November 2004

Part II, Chapter 204 of this regulation requires that all DOD personnel (military, civilian, and contractors) involved with the preparation and shipment of hazardous material (HAZMAT) for transportation receive training as specified in this directive.

2.4.5 U.S. Army Medical Command Regulation 40-35, Management of Regulated Medical Waste

U.S. Army Medical Command (MEDCOM) Regulation 40-35 provides requirements for the management of regulated medical waste (RMW) at Army facilities. Its purpose is to ensure RMW is managed in a manner that minimizes occupational exposure, protects both the environment and the public, and ensures compliance with Federal, state, and local regulations.

2.5 Local Regulations

2.5.1 FS Regulation 385-14, Chapter 14, Environmental and Historical Preservation

FS Regulation 385-14, Chapter 14, Environmental and Historical Preservation, was developed to ensure compliance with the Endangered Species Act, the National Historic Preservation Act, and the Native American Graves Protection and Repatriation Act. This regulation contains restrictions which govern training activities around cemeteries and historical areas identified on Fort Stewart training lands, as well as the protection of identified endangered species, i.e., Eastern Indigo Snake and the Red Cockaded Woodpecker (RCW). All personnel assigned, attached or involved in field training must understand the prohibitions contained in this regulation.

2.5.2 FS/HAAF Oil and Hazardous Substance Spill Prevention and Response Plan

The FS/HAAF Oil and Hazardous Substance Spill Prevention and Response Plan (SP&R) is a single operational source document designed to meet the combined regulatory requirements for a U.S. Environmental Protection Agency (EPA) Facility Response Plan (FRP), and an EPA Spill Prevention Control and Countermeasure (SPCC) Plan, and a U.S. Army Installation Spill Contingency Plan (ISCP). The plan addresses the emergency planning, notification, and response actions directed by RCRA, CERCLA, EPCRA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Area Contingency Plan (ACP). The plan addresses all aspects of SPCC requirements, response, organization, assessment, establishment of priorities, environmental considerations, recommended cleanup techniques, training and preventive maintenance.

2.5.3 FS/HAAF Pollution Prevention Plan

The FS/HAAF Pollution Prevention Plan establishes the installation’s commitment to environmental leadership in pollution prevention (P2) and outlines the concepts and practices necessary to reduce the use of HM and the release of pollutants to as near zero as is feasible. All

FS/HAAF personnel are to use this plan as a guide to develop ways to minimize the environmental impacts of their activities and achieve Federal, DOD, and U.S. Army P2 goals. This plan is a tool used to document, track, and manage the installation's P2 efforts in pursuit of achieving P2 goals.

2.5.4 FS/HAAF Stormwater Pollution Prevention Plan

The FS/HAAF Stormwater Pollution Prevention Plan (SWP3) has been developed to comply with GAEPD National Pollutant Discharge Elimination System (NPDES) General Permit Requirements for Stormwater Discharges Associated with Industrial Activities. The plan identifies industrial activities for each unit/activity located on FS/HAAF, the potential stormwater sources associated with those units/activities, and establishes the best management practices designed to control pollutants in discharges of stormwater.

2.5.5 TB 43-0134 Battery Disposition and Disposal

This Technical Bulletin (TB) establishes general procedures for the disposition and disposal of damaged, defective, depleted (spent) or unserviceable batteries. The principle purpose of this TB is to provide solid waste characterization guidance under RCRA regulations. The general requirements for disposition and disposal of batteries include solid waste characterization, hazardous characteristics, handling, fire protection, storage and transportation. The guidance and procedures in this TB are consistent with U.S. EPA and U.S. DOT regulations and DOD policy and will aid in complying with environmental solid waste regulations.

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CHAPTER 3 RESPONSIBILITIES

In order to meet Federal, State, and Army requirements, supervisors and commanders at FS/HAAF must provide emphasis and guidance to all persons generating and working with HW. To help prevent personal injury, or harm to public health and the environment, concerted efforts must be made by all personnel to ensure the safe handling, control, storage, and disposal of HW. Below is a detailed listing of specific responsibilities related to HW management.

3.1 Installation Commander

Considered to be the “owner/operator” of a waste generating facility, the Commander holds responsibility for all violations that occur on FS/HAAF.

- Approves and signs the HWMP.
- Provides command emphasis regarding environmental compliance.
- Chairs or appoints an individual to the Environmental Quality Control Committee (EQCC).
- Ensures that the Installation Environmental Coordinator (IEC) has sufficient personnel and resources to carry out the mission.
- Ensures that storage, treatment, and disposal of non-DOD HM on the installation comply with 10 U.S. Code (USC) 2692.

3.2 Environmental Quality Control Committee (EQCC)

The EQCC is comprised of members representing the Command, logistics, planning, legal, safety, maintenance, and tenant organizations.

- Develops overall HW management policies including, but not limited to, HW accumulation, on-site inspections, on-site storage, and turn-in procedures.
- Provides input to the IEC when operations on FS/HAAF change.
- Provides input to reduce costs, streamline efficiency, reduce the quantity, volume, and toxicity of HW, and presents viable P2 opportunities.
- Meets at least quarterly to discuss HW issues, policies, regulations, and any other issues.
- Addresses compliance findings and their corrective actions (CA) and closure.

- Reviews internal/external audit results, status and required CAs.

3.3 Unit Commanders

In accordance with AR 200-1, Section 1-28, and this plan, Unit Commanders are required to:

- Instill an environmental ethic in soldiers and civilians under their control.
- Ensure personnel receive required environmental training.
- Comply with installation policies, applicable Federal, State, and local environmental laws, regulations, Executive Orders, and overseas FGS.
- Report noncompliance and spills through appropriate channels to the GC.
- Incorporate environmental responsibilities and environmental risk management into unit SOPs and operation orders (OPORDs), and FRAG ORDs as appropriate; integrate environmental considerations into the planning and execution processes in accordance with FM 3-100-4.
- Appoint in writing and train Environmental Compliance Officers (ECOs) at appropriate organizational levels to ensure compliance actions take place (see FM 3-34.500 for environmental officer responsibilities).
- Appoint in writing and train Environmental Compliance NCOs at appropriate organizational levels to ensure that compliance actions take place.
- Support the installation-wide SMS.

3.4 Installation Environmental Coordinator (IEC)

The Installation Environmental Coordinator (IEC), i.e., Fort Stewart DPW Environmental Division personnel, manages all aspects of HW on FS/HAAF. The IEC:

- Provide HW management guidance and instructions to Unit Commanders and supervisors.
- Advise the Commander of issues that could place FS/HAAF in non-compliance with HW regulatory requirements.
- Maintain and operate the permitted Treatment, Storage and Disposal Facility (Hazardous Waste Facility) located at Fort Stewart (Bldg #1157).
- Maintain and operate the 90-day hazardous waste storage area located at Hunter Army Airfield.

- Maintain Hazardous Waste Facility Permit No. HW-045(S) in accordance with the Georgia Hazardous Waste Management Act and the Rules, Chapter 391-3-11.
- Maintain, implement, update, and distribute the HWMP.
- Sign HW manifests.
- Inspect HW operations and initiates corrective measures including recommending equipment for the handling and storage of HW.
- Coordinate training of personnel generating and working with HW.
- Maintain an audit trail of HW from point of generation to disposal.
- Maintain an activity-wide HM/HW inventory and provides a copy to the FS Fire Department and HAAF Fire Department.
- Serve as a member of the EQCC.
- Submit biennial reports and files generator exemption reports to the GAEPD.
- Coordinate availability of spill response and prevention material, and emergency supplies.
- Initiate processes to replace HM with less hazardous or non-hazardous materials.
- Coordinate HW removal by the waste contractor.
- Act as a liaison with the EPA, DRMO, and other Federal and state agencies in matters relating to HW.
- Ensure that information pertaining to new HW policies and procedures is communicated to all HW generators.
- Maintain HW manifests.
- Perform periodic assessment of waste management activities for consideration as significant aspects.
- Identify environmental funding requirements.
- Implement SMS tasks related to waste management.

3.5 Environmental Compliance Officers/NCO's (ECO/ECNCO)/Civilian Equivalents

- Advise chain of command/supervisory chain on environmental issues/imperatives, assist in unit/activity environmental compliance efforts.
- Act as liaison between unit/activity and IEC.
- Conduct weekly internal compliance inspections, implements correct actions, and records results.
- Conduct daily storm water checks, implements corrective actions, and records results.
- Attend required training courses provided by the IEC.
- Coordinate with the DOL HAZMART and the IEC for turn-in of hazardous materials.
- Provide appropriate environmental training to unit/activity personnel.
- Maintain unit/activity environmental records and reference library.
- Supervise spill response in unit/activity.
- Monitor/assist chain of command/supervisory chain in maintaining adequate supply of spill response material in unit/activity.
- Compose spill reports when necessary.
- Supervise collection and storage of hazardous wastes (HW) in unit/activity UPPs and SAPs
- Organize/supervise HW turn-in to applicable Hazardous Waste Storage Areas (Bldg #1157 at FS and Bldg #720 at HAAF) for unit/activity.
- Monitor HAZMART operations in unit/activity.
- Write and/or update unit/activity's environmental standard operating procedure (SOP).
- Attend EQCC meetings.

3.6 Used Product Point (UPP)/Satellite Accumulation Point (SAP) NOTE: The ECO/ECNCO will perform these duties or provide oversight to his/her alternate.

- Ensure that HW is managed in accordance with this plan.

- Designate an Alternate UPP/SAP HW Manager as needed.
- Conduct weekly inspections of UPP and SAP area.
- Complete “Unit Used Material Manifests” for hazardous waste turn-in.
- Coordinate HW turn-in to applicable Hazardous Waste Storage Areas (Bldg #1157 at FS and Bldg #720 at HAAF) for unit/activity.
- Attend all mandatory training required by the IEC.
- Ensure all personnel involved with handling and storage of HW are provided with proper training.
- Ensure that SDSs are available for all HM.
- Recycle or reuse materials when feasible.
- Identify segregate, accumulate, and label HW in accordance with IEC instruction.
- Respond to and reports all HM and HW spills/incidents.
- Maintain drain tables (when applicable).
- Obtain required emergency equipment, cleanup equipment, and proper HW accumulation containers.

3.7 Safety Officer

- Serve as a member of the EQCC.
- Provide recommendations regarding the safe handling, storage, and transportation of HM and HW.
- Ensure OSHA requirements are implemented.
- Assist the IEC in the implementation of this plan.
- Incorporate the HWMP into the Command Safety Program.
- Provide the IEC with any findings or deficiencies found during safety inspections.
- Ensure that safety data sheets (SDSs) are available for personnel managing and handling HM and HW.

- Ensure that personal protective equipment (PPE) is available for soldiers and civilians.
- Make recommendations for HM product substitutions that are safer and less hazardous.
- Coordinate the disposition of radioactive wastes.
- Participate in emergency response/incident evaluations.

3.8 Directorate of Logistics

- Manage and operate the Class III packaged POL warehouse (HAZMART) located at Fort Stewart (Bldg #1146).
- Establish standard operating procedures (SOP) and responsibilities for the management, transportation, storage, handling, quality surveillance, shelf life and turn-in of Class III packaged petroleum, oils and lubricants (POL) at the user level.
- Provide customers with written policy (SOP) for Class III packaged POL requisitioning.
- Review and assist the customer establishing and updating Basic and Operational loads.
- Ensure that HAZMART personnel receive adequate training to support the operation.
- Ensure that all products issued from HAZMART are bar-coded and an SDS is provided per item issued.
- Ensure that all products issued from HAZMART are serviceable and have at least 90 days of shelf life remaining.
- Assists the customer when necessary.
- Coordinate and conduct all Hazardous Materials Management Program (HMMP) meetings.

3.9 Defense Reutilization and Marketing Office

- Operate under guidelines promulgated by the Defense Logistics Agency and DOD.
- Determine marketability of all DOD owned HM/HW for proper sale, reuse, or disposal.
- Dispose and/or arrange to dispose of government property including HW.
- Provide unit disposal costs for each HW stream.

- Oversee and initiate contracts for HW disposal in accordance with DOD 4160.21-M and DLAM 6050.1 and ensure compliance with all Federal and State regulations.
- Issues instructions regarding HW turn-in for generating activities.

3.10 Hazardous Waste Generating Activities/Units

- Appoint an Environmental Compliance Officer (ECO) and an Environmental Compliance NCO (ECNCO) in writing. The ECO must be the rank of Sergeant First Class (SFC) or above. The ECNCO must be the rank of SGT (E5) or above. The ECO/ECNCO should have a minimum of 12 months retention within the unit.
- Appoint and train personnel as needed to serve as UPP/SAP HW Manager to ensure operational compliance.
- Ensure all HM and HW is managed and disposed of in accordance with this plan.
- Report instances of non-compliance to the IEC within 24-hours.
- Pay for HW disposal costs, permits, fees and any other costs associated with the environmental aspects of their operations.
- Pay all fines and penalties resulting from violations that are the fault of the unit/activity.
- Ensure spill response and prevention materials are available.
- Coordinate with the IEC to establish alternate disposal/storage contingency plans.
- Ensure empty containers are rinsed/drained and collected for recycling.
- Report spills or releases of petroleum, hazardous substances, or HW to the FS/HAAF Fire Department.
- Ensure all HW storage areas and HW generation points are operated in accordance with this plan.
- Attend EQCC meetings.
- Maintain HW records.
- Ensure all HW containers are properly labeled and ensure turn-in to DRMO or the representative waste disposal contractor.
- Ensure all oil/water separators are clean and serviceable.

3.11 Hazardous Material Users/Hazardous Waste Generators

- Ensure all HM and HW is managed and disposed of in accordance with this plan.
- Implement waste management guidance provided by unit ECO and IEC.
- Minimize the generation of HW.
- Substitute HM with less hazardous products.
- Contain, manage, and reports spill incidents to FS/HAAF Fire Department.
- Inform IEC of new waste generating processes.
- Contact IEC when waste containers are three-quarters full to schedule a turn-in.
- Ensure waste containers remain closed except when adding or removing waste.
- Attend all mandatory training.

3.12 FS/HAAF Fire Department

- Ensure that training is provided for firefighter personnel to maintain proficiency in responding to HM/HW incidents.
- Respond to HM/HW incidents.
- Serve as the Incident On-Scene Commander (IOSC) for all responses to HM/HW incidents.
- Manage the Installation Response Team (IRT).
- Assist in training activity/unit personnel as requested by IEC.
- Maintain technical library of SDSs, chemical hazards, etc.
- Maintain installation wide HM/HW inventory, as provided by the IEC.

3.13 MEDDAC Waste Management Personnel

- Ensure that Regulated Medical Waste (RMW) is identified and managed according to GAEPD regulations and the policies and procedures provided in MEDCOM Reg 40-35. Where medical waste regulations conflict with hazardous waste regulations, personnel will follow the most stringent regulation.

- Arrange for, and supervise the collection, storage, transportation, and disposal of RMW, and the training of personnel in RMW management procedures within the AMEDD organization.
- Serve as the RMW generator on FS/HAAF.
- Establish and use management controls and periodic inspections to ensure compliance with the policies and procedures provided in MEDCOM Reg 40-35 and GAEPD regulation.
- Segregate RMW from general waste and HW at its point of origin.
- Ensure that items designated as RMW are placed into approved RMW containers. Place sharps into puncture resistant containers designated for sharps use. Use RMW bags/containers for all other RMW items not designated as sharps.
- Store RMW in designated RMW storage areas. Mark the entrance to the main storage area with the words “Regulated Medical Waste.” In addition to this marking, the universal biohazard symbol may also be used to mark the main storage area.
- Arrange for RMW to be removed by a licensed/permitted RMW waste disposal contractor.
- Monitor the contractor and maintain records to verify all RMW shipped of FS/HAAF is properly treated and disposed of.
- Provide oversight and consultation for non-medical incidents involving human or animal biohazard materials (crime scenes, suicides, euthanized animals, etc.)

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CHAPTER 4 HAZARDOUS WASTE GENERATOR STATUS

4.1 Generator Status Defined

Federal and Georgia regulations define three categories of HW generators: Conditionally Exempt Small Quantity Generator (CESQG), Small Quantity Generator (SQG) and Large Quantity Generator (LQG). Generator status is determined by the amount of HW generated by a facility in a calendar month. Generators must determine which category their facility is classified as in order to determine which regulations must be followed. A facility may change generator status from one category to another depending upon generation rates and accumulated quantities.

Fort Stewart and Hunter Army Airfield are both LQGs and are subject to all Federal and State HW regulations. The Garrison Commander maintains separate EPA HW generator identification numbers (generator registration) for FS and HAAF.

4.2 Applicability

All HWs generated within the fence lines of FS and HAAF are included in the generation amounts reported by FS/HAAF and are subject to HW regulations applicable to FS/HAAF.

FS/HAAF tenants do not maintain separate EPA HW generator ID numbers and are included in the FS/HAAF HW Management Program. All HW generators, including garrison activities, military units, and tenant organizations on FS/HAAF must comply with the provisions of this plan. The IEC will work with all units/organizations to form a partnership for environmental stewardship.

4.3 HW Generators

There are two types of HW generators on FS/HAAF: units/activities that generate HW on a regular basis and units/activities that don't routinely generate waste but may occasionally generate some HW. Visiting units/activities utilizing FS/HAAF for training are included in the HW Management Program and are responsible for adhering to the requirements of this Plan.

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CHAPTER 5 PACKAGED POL MANAGEMENT

5.1 Hazardous Materials (HM) Management

FS/HAAF manages hazardous substances (HM, HW, and other regulated materials/wastes) in accordance with all Federal, State, DOD, and local environmental, health and safety, and transportation requirements. For the purposes of this Plan, HMs are those materials that because of their ingredients, pose a potential risk to health, safety, property, or the environment when improperly used, transported, handled, or stored. The difference between a HM and a HW is that a HW is still hazardous but can no longer be used for its intended purpose because it is contaminated, used, spent, etc. Most units/activities on FS/HAAF use HM and generate HW.

In 2001 the FS/HAAF Directorate of Logistics (DOL) implemented a Hazardous Material Management Program (HMMP) which included establishment of a HAZMART. The HAZMART issues HM from a centralized location which prevents individual units/activities from ordering excessive inventories which often expire and become HWs. This centralized approach to HM management reduces acquisition costs; reduces waste generation from overstocked/expired product; risk to personnel and facilities by limiting the amount of HM stored onsite; and enhances regulatory compliance by tracking the use of HM from “cradle-to-grave.”

The HAZMART issues Class III supplies (packaged petroleum, oil, and lubricants) and a limited amount of HM commonly used on FS/HAAF such as bleach, Simple Green[®] cleaner, and environmentally preferred parts cleaner solvent. These items are referred to in this Plan as packaged POL products.

Proper HM management requires unit/activity personnel to account for the materials in stock, store them properly, and understand the threats posed by reading and maintaining an SDS on file for each HM used.

5.2 Using the HAZMART

Any unit/activity with a DODDAC can and is encouraged to use the HAZMART for acquisition of packaged POL products. The HAZMART stocks all Class III items routinely used on FS/HAAF. If a unit requires an item that is not stocked, the HAZMART will acquire the material, as long as it is a Class III (P) item.

The FS/HAAF DPW manages delivery and replenishment of all packaged POL products. DPW visits the unit/activity two times a week and will come more frequently if needed. Units/activities must order what is needed and abide by the DPW and DOL usage and storage guidance requirements specified in the HQ, 3D ID and FS DPW Hazardous Material Storage, External Standard Operating Procedures for Class III Package POL Management.

For assistance with setting up an account or obtaining supplies please contact:

- HAZMART Assistant Manager at 767-3267
- HAZMART Program Lead and HAZMAT Storage Inspector at 767-1594
- HAZMART Warehouse at 767-8650

5.3 Storage

The preferred storage location for packaged POL is a secure HAZMART locker approved by the IEC and Safety Office. All HAZMART lockers will be grounded at all times. “No Smoking Within 50 Feet” signs and appropriate HM hazard signs must be posted to communicate the danger of the materials stored inside the locker. Serviceable fire extinguishers must be available at all times. POL must not be stored near storm water drains, wash racks, waterways, or near moving vehicle paths unless absolutely necessary. These safeguard measures will minimize land and water contamination in case of a spill. If a storage area other than a HAZMART locker is used, the unit/activity must have containment capabilities onsite such as sandbags, absorbent barriers, or secondary containment pallets.

The items listed below must not be stored in the HAZMART locker/storage area. These items will be labeled accordingly and stored in the unit/activity UPP/SAP or elsewhere in accordance with the provisions in this Plan. This list is not all-inclusive:

- Opened containers of Class 3(P)
- Oily rags (these are considered combustible/flammable items)
- HW such as: used antifreeze, used oils, off spec fuels, used dry sweep, used grease cartridges, used solvents, contaminated soil, and contaminated fuel
- Fuel cans
- All batteries, used and serviceable

Paints, aerosol cans, combustible and flammable products will be stored in an approved flammable container and not in the HAZMART lockers.

5.4 Container Management

All containers issued through the HAZMART program are tracked and reported through the Hazardous Material Management System (HMMS). This is accomplished through use of a bar-coded label. The HAZMART will label each container with a tracking bar code. Unit/activity personnel must not deface or remove the label.

Empty containers must be drained on an approved table (see Ch 7.1) and collected in a suitable collection container provided by the IEC. DPW personnel will pick up the empty containers and return them to the HAZMART where the label on every empty container will be scanned into HMMS to complete the tracking process. ***It is IMPERATIVE that the label remain on the container until it is returned to the HAZMART.*** After the containers are scanned they will be placed in recycling containers.

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CHAPTER 6 HAZARDOUS WASTE IDENTIFICATION

6.1 Hazardous Waste Identification Requirement

A generator evaluates and determines whether or not a waste is classified as a HW because it is the law. Hazardous waste management is subject to numerous regulatory requirements; violations of which can result in notices of violations and/or fines. Information about the identity of a waste is needed to comply with regulatory requirements concerning labeling, storage and disposal.

FS/HAAF is responsible for evaluating all wastes and determining if they are hazardous according to 40 CFR 261.3. Determinations are based on generator knowledge following the steps provided in section 6.3, Hazardous Waste Identification Process. In some cases it may not be possible to make a waste determination by using generator knowledge and the waste may require chemical analysis.

For assistance in determining if wastes are hazardous, contact the Fort Stewart IEC at (912) 767-4634. The facility street address is:

Directorate of Public Works
ATTN: Environmental Office
1550 Veterans Parkway
Fort Stewart, Georgia 31314-5000

6.2 Unit/Activity Waste Responsibilities

The IEC evaluates and characterizes all wastes generated on FS/HAAF. After a waste is identified, the generator must work with the IEC to ensure that a Hazardous Waste Profile Sheet (HWPS) is developed for each waste stream. The IEC will develop the HWPS using the Defense Reutilization and Marketing Service (DRMS) Form 1930, see Figure 6-1 for a sample form. HWPSs must be reviewed and updated annually and when there is a change in the process generating the waste. Generators are responsible for notifying the IEC when there is a change in any process generating waste. HWPSs will be maintained, reviewed, and updated annually by the IEC. The HWPS must accompany all waste turned in to the DRMO. For the turn-in of expired, unused, unopened HM, the required supporting documentation is an SDS. Note, the IEC will maintain completed HWPS for a minimum of 3 years after a HW ceases to be generated.

Each waste stream generated at FS/HAAF must undergo a HW characterization. Wastes may be identified in two ways:

Generator's Knowledge. Waste characterization may be conducted by generator's knowledge following the procedures presented in Section 6.3 of this chapter or by using an SDS. Each unit/activity is responsible for notifying the IEC when a new waste is being generated or when

there has been a change in a waste generating process. Contact the FS/HAAF IEC at (912) 767-4634 for assistance in making a waste determination.

Laboratory analysis. A laboratory analysis can help identify unknown wastes. The laboratory analysis of waste will be performed:

- To identify an unknown waste.
- To confirm the classification of a known waste.
- To confirm whether or not a waste is hazardous when reasonable doubt exists.
- To identify the specific constituents of the waste.

6.3 Hazardous Waste Identification Process (What Makes a Waste Hazardous)

Proper identification is essential to the success of the HW management program. The RCRA regulations at 40 CFR 262.11 require that any person who produces or generates a waste must determine if that waste is hazardous. In doing so, 40 CFR 262.11 presents the steps in the HW identification process:

- Is the waste a “solid waste” as defined in the HW regulations (40 CFR 261.2)?
- Is the waste specifically excluded from the HW regulations (40 CFR 261.4)?
- Is the waste a “listed” HW (40 CFR 261.30-33)?
- Does the waste exhibit a characteristic of HW (40 CFR 261.20)?

6.3.1 Definition of Solid Waste

A SW is any discarded material that is not excluded by 40 CFR 261.4(a) or that is not excluded by variance granted under 40 CFR 260.30 and 40 CFR 260.31. A SW is any discarded material, which is abandoned, recycled, considered inherently waste-like, a military munition identified as SW in 40 CFR 266.202, or used in a manner constituting disposal, or any material that cannot be used for its intended purpose. Hazardous wastes are a subset of SWs.

6.3.2 Hazardous Waste Exclusions

The following is a partial list of wastes that are not SWs and are therefore excluded from RCRA HW management regulations. These wastes are regulated by the EPA under other regulations that include the CWA, CAA and RCRA-D.

- Domestic sewage.

- Industrial wastewater discharges that are point source discharges (see section 402 of the Clean Water Act).
- Excluded scrap metal being recycled.
- Shredded circuit boards being recycled provided they are free of mercury switches, mercury relays, nickel-cadmium, and lithium batteries.
- Household waste.
- Non-terne plated used oil filters provided they have been hot-drained.

6.3.3 Listed Hazardous Waste

The EPA established four types of listed HWs, which are grouped into three categories: non-specific source wastes, specific source wastes, and commercial chemical products:

Hazardous waste from non-specific sources (40 CFR 261.31). This is also known as the “F-list.” The listed wastes are from non-specific sources. Common F-listed wastes found on FS/HAAF may include solvents and thinners from degreasing and painting operations, used rags, and weapons cleaning solvents.

Hazardous wastes from specific sources (40 CFR 261.32). This list is also commonly known as the “K-list.” These HWs are generated by specific manufacturing operations. FS/HAAF HW generators should not generate any K-listed HW.

Discarded commercial chemical products (40 CFR 261.33(a) – (e)). This list is also known as the “P-list.” This includes chemicals in pure form, in commercial grade form or as the sole active ingredient in a chemical formulation. Products identified on this list are also known as acute HW.

Discarded commercial chemical products (40 CFR 261.33(f)). This list is also known as the “U-list.” Just like the P-list, the U-list includes chemicals in pure form, in commercial grade form or as the sole active ingredient in a chemical formulation.

On 16 May 2001, the EPA issued a final rule that allows more wastes to take advantage of exclusions from HW regulations. With the new changes, all wastes **listed solely** for the characteristics of **ignitability, corrosivity, and/or reactivity** are not considered HWs if they no longer exhibit any of those characteristics.

6.3.4 Characteristic Hazardous Wastes

A SW that is not excluded from regulation as a HW under 40 CFR 261.4(b) is a HW if it exhibits any of the flowing characteristics (40 CFR 261 Subpart C):

Ignitability – D001

- A liquid, other than an aqueous solution containing less than 24% alcohol by volume and has a flashpoint less than 140°F (60°C).
- It is a non-liquid and is capable, under standard pressure and temperature, of causing fire through friction, absorption of moisture or spontaneous chemical changes and burns so vigorously that it creates a hazard.
- It is an ignitable compressed gas.
- It is an oxidizer.

Corrosivity – D002

- It is an aqueous solution and has a pH less than or equal to 2 or greater than or equal to 12.5.
- It is a liquid and corrodes steel at a rate greater than 6.35 mm per year at a test temperature of 130°F (55°C).

Reactivity – D003

A SW exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

- It is normally unstable and readily undergoes violent change without detonating.
- It reacts violently with water.
- It forms potentially explosive mixtures with water.
- When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
- It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 generates toxic gases.
- It is capable of detonation or explosive reaction.
- It is a forbidden explosive as defined in 49 CFR 173.54, Class A explosive in 49 CFR 173.53, or a Class B explosive as defined in 49 CFR 173.53.

Toxicity – D004 – D043

A material exhibits the characteristics of toxicity if the extract from a representative sample of the material analyzed with a toxicity characteristic leaching procedure (TCLP) contains any of the elements in 40 CFR 261.24 at a concentration equal to or greater than that specified in the table. A waste that exhibits TCLP toxicity is assigned the EPA HW number that corresponds to the contaminant in the TCLP table represented in Table 6-1. Examples of this type of characteristic are lead in paint scrapings and silver-bearing wastes from photographic processes.

Table 6-1. TCLP.

Maximum Concentration of Contaminants for the Toxicity Characteristic					
EPA HW #	Contaminant	mg/L	EPA HW #	Contaminant	mg/L
D004	Arsenic	5.0	D032	Hexachlorobenzene	0.13
D005	Barium	100.0	D033	Hexachlorobutadiene	0.5
D018	Benzene	0.5	D034	Hexachloroethane	3.0
D006	Cadmium	1.0	D008	Lead	5.0
D019	Carbon tetrachloride	0.5	D013	Lindane	0.4
D020	Chlordane	0.03	D009	Mercury	0.2
D021	Chlorobenzene	100.0	D014	Methoxychlor	10.0
D022	Chloroform	6.0	D035	Methyl ethyl ketone	200.0
D007	Chromium	5.0	D036	Nitrobenzene	2.0
D023	o-Cresol	200.0	D037	Pentachlorophenol	100.0
D024	m-Cresol	200.0	D038	Pyridine	5.0
D025	p-Cresol	200.0	D010	Selenium	1.0
D026	Cresol	200.0	D011	Silver	5.0
D016	2,4-D	10.0	D039	Tetrachloroethylene	0.7
D027	1,4-Dichlorobenzene	7.5	D015	Toxaphene	0.5
D028	1,2-Dichloroethane	0.5	D040	Trichloroethylene	0.5
D029	1,1-Dichloroethylene	0.7	D041	2,4,5-Trichlorophenol	400.0
D030	2,4-Dinitrotoluene	0.13	D042	2,4,6-Trichlorophenol	2.0
D012	Endrin	0.02	D017	2,4,5-TP (Silvex)	1.0
D031	Heptachlor (and its epoxide)	0.008	D043	Vinyl chloride	0.2

6.4 Non-Hazardous Wastes

Many waste streams generated at FS/HAAF do not meet the EPA HW criteria but must still be managed and disposed of as a special waste and are referred to as hazardous wastes or “F”s. Examples include, but are not limited to, used oil, oily rags, used dry sweep, and used antifreeze. See Chapter 10, Management of Specific Waste Streams, for detailed information on how to manage these wastes.

6.5 Typical Operations and Related Wastes

Typical Operations and Related Wastes identified at FS/HAAF are identified in Table 6-2.

Table 6-2. Typical Operations and Related Wastes.

Typical Operation	Related Waste	
Battery Shop	Battery Acid	Alkaline Fluids
	Batteries	Battery Cells
	Spill Residues	
Carpentry Shop	Varnishes	Stains
	Adhesives	Sealants
	Aerosols	Spill Residue
Office/Housing Maintenance Paint Operations	Solvents	Oils
	Paints	Adhesives
	Aerosols	Fluorescent Light Bulbs
	Paints	Strippers/Thinners
	Epoxies	Filters
	Blast Residue	Spill Residue
TASC	Solvents	Photo Chemical
	Inks	Blast Residue
	Spill Residue	
Vehicle Maintenance	Solvents	Brake Fluid
	Off-Spec JP-8	Antifreeze
	Batteries	Battery Acid
	Paints	Paint Strippers
	Paint Thinners	Epoxies
	Degreasers	Mineral Spirits
	Tank Bottom Water & Sludge	Oils & Lubricants
	Oil Filters	Asbestos Brake Pads
	Spill Residue	Oily Rags
	Waste Mogas	Solvent Rags
Adhesives/Sealants		

Other potential HW operations and related wastes include:

- **Electrical Shops:** Solvents, oils, PCB's
- **Metal Shops:** Cutting oils, metal shavings
- **Energy Production Operations:** Boiler blowdown, feedwater chemicals
- **Hospitals:** Expired medical supplies, chemicals, x-ray fixer
- **NBC Storage:** DS-2, STB, decon kits, detector kits, filters, batteries
- **Weapons Storage:** Excess ammo, cleaning fluids, contaminated rags
- **Dry Cleaners:** Perchloroethylene, filters
- **Printing Plants:** Solvents, inks, contaminated rags
- **Incinerators:** Heavy metals, ashes
- **Warehouses:** Expired hazardous materials, spill residues

6.6 DRMS Form 1930, Hazardous Waste Profile Sheet

Once a waste stream has been identified, generating units/activities must work with the IEC to ensure that a Hazardous Waste Profile Sheet (HWPS) is developed for each waste stream. DRMS Form 1930, Hazardous Waste Profile Sheet, is the standard form used for characterizing and quantifying hazardous waste for all disposal actions, regardless of whether or not the DRMO is the disposal agent. See Figure 6.1 for a sample DRMS Form 1930. The IEC assigns an initial reference number to each HWPS which will then be used for each subsequent turn-in of the same waste stream. HWPSs (DRMS Form 1930) will be maintained, reviewed, and updated annually by the IEC. If a process change occurs which could alter the characteristics of a waste stream, or a new waste stream is generated by FS/HAAF activities, an evaluation will be performed and a corresponding DRMS Form 1930 must be completed.

6.7 Land Disposal Restriction Notification Form

During waste characterization the IEC will evaluate Land Disposal Restriction Notification Forms (LDR) and if required, attach an LDR to the HWPS. Figure 6-2 provides a uniform example of an LDR form.

6.8 Universal Waste Defined

Universal waste generated at FS/HAAF is treated like HW and falls under the HW regulations; however, FS/HAAF adheres to the less stringent accumulation requirements of the Universal Waste Regulations. Georgia's Universal Waste Rule covers the following wastes: batteries (e.g., certain lead-acid batteries not recycled under other regulations; button, cylindrical and rectangular mercury-oxide; button silver-oxide and zinc-air; and 9-volt, and button rechargeable lithium); pesticides; mercury containing devices (e.g., thermostats, switches); and electric lamps (e.g. fluorescent, high intensity discharge). Certain other battery types (e.g. alkaline and carbon zinc cells that have been manufactured without mercury) may not be classified as hazardous wastes, and would therefore not fall under the Universal Waste Rule. However, as a matter of responsible practice, such batteries should be collected and sent to recycling facilities rather than being landfilled.

Figure 6-1. DRMS Form 1930, HW Profile Sheet, Page 2.

HAZARDOUS WASTE PROFILE SHEET <i>(Continued)</i>			WASTE PROFILE NO.
3. MATERIAL COMPOSITION / UNDERLYING HAZARDOUS CONSTITUENTS			
CAS #	COMPONENT <small><i>(Be as descriptive as possible. Chemical names, as well as generic descriptions. e.g., sludge, 'paint solids', 'water' etc. are acceptable.)</i></small>	CONCENTRATION	RANGE
RANGE TOTAL MUST EQUAL AT LEAST 100%			
4. SHIPPING INFORMATION			
DOT HAZARDOUS MATERIAL? <input type="checkbox"/> YES <input type="checkbox"/> NO <small><i>(If "NO" skip to block 5)</i></small>			
PROPER SHIPPING NAME			
HAZARD CLASS		U.N. or N.A. NO.	PACKING GROUP
ADDITIONAL DESCRIPTION			
METHOD OF SHIPMENT <input type="checkbox"/> BULK <input type="checkbox"/> DRUM <input type="checkbox"/> OTHER			
DOT REPORTABLE QTY <small><i>(RQ)</i></small>			
EMERGENCY RESPONSE GUIDE EDITION <small><i>(YR)</i></small>		EMERGENCY RESPONSE NUMBER	
5. SPECIAL HANDLING INFORMATION			
6. GENERATOR CERTIFICATION			
<input type="checkbox"/> CHEMICAL ANALYSIS <small><i>(ATTACH TEST RESULTS)</i></small> <input type="checkbox"/> USER KNOWLEDGE <small><i>(ATTACH SUPPORTING DOCUMENTS)</i></small> EXPLAIN HOW AND WHY THESE DOCUMENTS COMPLY WITH RCRA REQUIREMENTS			
CERTIFICATION I, _____ HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS IS TO THE BEST OF MY KNOWLEDGE AN ACCURATE REPRESENTATION OF THE WASTE TURNED IN TO THE DRMO. ALL KNOWN OR SUSPECTED HAZARDS HAVE BEEN DISCLOSED. _____ _____ <i>Signature of Generator's Representative</i> <i>Date</i>			

Figure 6-2. Example Land Disposal Restriction Notification Form.

Master Form for LDR Notifications/Certifications That Are Not Available From Offsite Facilities

1. Generator information Name _____ Address _____ EPA ID No. _____		2. Receiving facility information (if applicable) Name _____ Address _____ Manifest No. _____ EPA ID No. _____			
3. Waste description at point of generation					
Line Item	Waste description	Hazardous waste code(s)	LDR subcategory	WW/MWW	Underlying hazardous constituents [§268.2(f)] ¹
4. Waste disposition					
Line Item	Subtitle C exclusion subsequent to point of generation (if applicable)	Current disposition of waste	§ 268.45, Table 1 technology used to treat debris (if applicable)	Date shipped (if applicable)	
5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characteristic wastes managed in wastewater treatment systems discharging under the CWA)? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes, this constitutes the §268.7(a)(7) one-time notification.) ²					
6. Was the waste characteristic at the point of generation, treated onsite to remove the characteristic, and treatment residues then shipped to a Subtitle D land disposal facility? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes, complete Certification 1 or 2.) ³					
7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under §261.3(f)(1) by treating it using an extraction or destruction technology in §268.45, Table 1? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes, complete Certification 3.) ⁴					
8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under §261.3(f)(2) by receiving a "no-longer-contains" determination from EPA or the authorized state? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes, this constitutes the §268.7(d)(1) one-time notification.) ⁴					
9. Was the waste "soil" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste via a "no-longer-contains" determination from EPA or the authorized state or by the generator determining that the soil no longer exhibits a characteristic? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes, this constitutes the §268.7(e)(1) one-time notification.) ²					
10. Is the waste residue from treating K061, K062, and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in §261.3(c)(2)(ii)(C), 2) does not exhibit a any characteristics, and 3) is shipped to a Subtitle D land disposal facility? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes, complete Certification 4.) ⁵					
1. <input type="checkbox"/> Waste that has been treated to remove a characteristic and meets underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic and that underlying hazardous constituents, as defined in §268.2(i) have been treated on-site to meet the §268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.				Applies to line items: _____ Reference: §268.7(b)(4)(v) and 268.9(d)	
2. <input type="checkbox"/> Waste that has been treated to remove a characteristic but does not meet underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.				Applies to line items: _____ Reference: §268.7(b)(4)(iv) and 268.9(d)	
3. <input type="checkbox"/> Debris that has been treated to meet the alternative treatment standards. I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.				Applies to line items: _____ Reference: §268.7(d)(3)(iii)	
4. <input type="checkbox"/> HTMR residue from treating K061, K062, and/or F006 wastes. I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.				Applies to line items: _____ Reference: §261.3(c)(2)(ii)(C)	
Generator's signature _____		Printed/typed name & title _____		Date _____	

¹ Use an attachment if necessary. If underlying hazardous constituents will be treated and monitored, there is no requirement to list any on this notification.

² This one-time notification is placed in the facility's onsite files only. For compliance with the §268.9(d) one-time notification and certification, if the waste does not meet universal treatment standards for underlying hazardous constituents (i.e., Certification 2 above), the generator must somehow communicate the need for UHC treatment to the Subtitle D facility; the notification and certification must be updated if the process or operation generating the waste changes and/or if the Subtitle D receiving facility changes.

³ This one-time notification must be sent to EPA or the authorized state and placed in the facility's files. It is not sent with the shipment to the Subtitle D receiving facility. The notification must be updated if 1) a different type of debris is treated, 2) a different §268.45, Table 1 technology is used to treat the debris, and/or 3) the Subtitle D receiving facility changes. The certification (Certification 3 above) must be placed in the facility's files for each shipment of treated debris.

⁴ This one-time notification must be sent to EPA or the authorized state and placed in the facility's files. It is not sent with the shipment to the Subtitle D receiving facility. The notification must be updated if the Subtitle D receiving facility changes.

⁵ This one-time notification and certification must be sent to EPA or the authorized state and placed in the facility's files. It is not sent with the shipment to the Subtitle D receiving facility. The notification and certification must be updated if the process or operation generating the waste changes and/or if the Subtitle D receiving facility changes.

Source: McCoy and Associates, Inc.

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CHAPTER 7 HAZARDOUS WASTE MANAGEMENT

The EPA and GAEPD strictly regulate HW accumulation and storage procedures. Improper HW accumulation and storage deficiencies are the most frequently cited regulatory violations.

Requirements of this chapter are applicable and must be applied to Petroleum, Oil and Lubricant (POL) and special wastes detailed in the chapters that follow.

7.1 Hazardous Waste Containers

7.1.1 Container Selection

Each generating unit/activity at FS/HAAF is responsible for maintaining an adequate number of containers for routine HW collection. All containers used for accumulation must be suitable for the types of products being stored. Environmental Compliance Officers (ECOs) must first determine the type of wastes to be accumulated prior to selection of appropriate storage containers. Hazardous waste must be accumulated in United Nations (UN) approved containers and must not be placed in containers exceeding 55 gal in volume. Containers will be issued to generating units/activities on a one-for-one basis through applicable Hazardous Waste Storage Areas (Bldg #1157 at FS or Bldg #720 at HAAF). Containers can be reused; however, they must be free of all previous residues and labeled appropriately prior to reuse.

Table 7-1 identifies the standardized type and color specifications for various waste collection containers used at FS/HAAF. When initial issue or replacement is required, these containers are provided by designated Hazardous Waste Storage Areas. Units/Activities that wish to purchase environmental equipment may consult the IEC to identify potential sources.

Table 7-1. Container Guidance.

Type of Waste	Type of Container	Color
Off-Spec Jet-A/F-24	Closed head (CH) 55 gal (55) Metal Drum (DM)	Red
Used Antifreeze	CH 55 DM	Green
Used Synthetic Oils	Above Ground Storage Tank (AST)	Tan
Used Oil Filters	Open head (OH) 55 DM	Black
Used Fuel Filters	OH 55 DM	Black
Used Dry Sweep	OH 55 DM	Black
Used Rags	OH 55 DM	Black
Any Other Non-Specified Liquid Waste	CH 55 DM or DF	TBD

NOTE: If you have a “peculiar” category of HW that does not fit any of the descriptions listed in Table 7-1, contact the applicable Hazardous Waste Storage Area at FS (912) 767-4634 or HAAF (912) 315-6287 for guidance.

7.1.2 Container Condition

All containers used for waste accumulation shall be free of defects or deterioration. All containers used to store/hold HW must meet certain requirements and comply with 40 CFR 265.171 - 265.173(a). The containers holding HW must be:

In good condition. The container must not be leaking, rusted, corroded, dented, or have non-working caps/bungs or other sealing devices. It must not have any bulges, dents in seams/corrugations, or be deteriorated in any other way. If a container leaks or is not in good condition, the contents must be transferred to another container that meets all standards, or be placed in an overpack. Overpacks must be filled with absorbent material capable of soaking up liquid as a precaution against leaks within the overpack.

Made of a compatible material. The container must be made of a material that will not react or deteriorate when in contact with the material or waste. For example, acids cannot be placed in a steel drum because the acid will corrode the drum, causing it to leak.

Securely closed. All containers used to store HW must have a cover or lid that closes and seals tightly to prevent spills or the release of fumes. Storing wastes in open containers or buckets is prohibited. Containers must be tightly closed after every use. A special funnel that is designed not to leak if the container is overturned, and that does not allow fumes to escape, is required if the funnel remains attached to the container.

In compliance with DOT requirements. All containers used to store HW must meet DOT specified packaging requirements.

7.1.3 Empty Containers

7.1.3.1 A container that once held HW, other than an acute HW or compressed gas, will be considered empty if as much HW as possible has been removed using commonly employed methods. At FS/HAAF drain tables will be utilized to ensure the containers are empty. See Chapter 9.32 for guidance in drain table operations.

A container is considered empty after a drain table if:

- No more than one inch of residue remains in the bottom of a 110 gallon or less sized container, or
- No more than 0.3% by weight of total capacity remains in the bottom of a container greater than 110 gallon in size.

Empty containers in good condition that did not contain acute HW must be turned in to the IEC for reuse. If a container is not suitable for reuse it must be recycled, either through the DRMO, HAZMART, or the FS/HAAF recycling program.

All containers provided by the HAZMART must be emptied, collected, and turned in to the HAZMART (DPW performs this function) for tracking and reporting in HMMS.

7.1.3.2 Acute HW Containers

Empty containers that held acute HW (p-listed) must be:

- Disposed of as a HW,
- When the containers are empty they will be managed according to 7.1.3.1 above.

7.1.3.3 Compressed Gas Cylinders

A compressed gas cylinder that held a HW is considered empty when the pressure in the cylinder approaches atmospheric pressure (no gas comes out when the valve is open).

- Return empty, vendor owned cylinders to the vendor.
- Turn in unusable, government-owned cylinders to the DRMO for scrap metal recycling.

7.1.4 General Container Management

- Drums that are 85 gallon or larger are designated as overpack containers for leaking drums and are not for general use.
- Containers will be stored in such a manner so that labels are easily visible.
- A container will not be opened, handled, or stored in a manner that may cause it to leak.
- Containers used for storing waste will not be overfilled. At least four (4) inches of head-space will be left to allow for expansion/contraction due to temperature fluctuations.
- Containers must not be exposed to snow, ice, or rain accumulation.
- Any amount of spill residue collected in secondary containment equipment must be immediately cleaned and removed.
- If after accumulating waste in a container it is deemed unserviceable, that container must be overpacked in a larger serviceable container or the contents transferred to a serviceable container.

7.2 Compatibility

Containers must be compatible with the wastes they contain. Many HWs, when mixed with other waste or materials, can produce effects that are harmful to human health and the environment. Effects can include: (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dust, mists, fumes, or gases, or (5) flammable fumes or gases.

Incompatible wastes must never be stored in the same container or next to each other. Containers holding wastes that are incompatible with waste stored in nearby containers must be separated or protected from each other by means of a wall, berm, or other device to prevent mixing. Appendix D contains a HW compatibility chart to assist in making a waste compatibility determination.

Technical Manual (TM) 38-410, Storage and Handling of Hazardous Materials, establishes procedures for the receipt, storage, and handling of HM and wastes by DOD components, installations, and activities. The TM must be used in conjunction with pertinent Service-specific and DOD HM procedures, regulations, manuals, and documents to support safe, effective, and environmentally sound management of HM throughout their life cycle.

7.3 Labeling and Marking

Each unit/activity at FS/HAAF is responsible for ensuring that waste containers are properly labeled in their designated areas. Each waste container must be properly labeled with the contents using the labeling system specified by the IEC. None of the labels used at the unit/activity level should have any provisions for recording a date. Labels can be obtained from the IEC. Labels no longer applicable to the contents will be removed or painted over to make them unreadable. Chapter 9, Management of Specific Waste Streams, provides detailed waste description information.

7.4 Used Product Points (UPPs)/Satellite Accumulation Points (SAPs)

UPPs/SAPs are the initial accumulation areas at or near the point of HW generation which are under the control of the operator of the process generating the waste. The UPPs/SAPs is designed to store limited amounts of HW at or near the point of waste generation for a limited time period and shall be constructed to include the following:

- Secondary containment system such as a concrete berm, poly-pack, floor pan or spill pallet.
- A sign or signs which state “Used Product Point or Satellite Accumulation Point.”
- A sign or signs which state “NO SMOKING WITHIN 50 FEET.”
- A sign listing the telephone numbers of people/organizations to call in case of a spill or emergency. At a minimum, the sign should state “IN CASE OF SPILL OR EMERGENCY, IMMEDIATELY CONTACT THE FIRE DEPARTMENT (911) AND

ENVIRONMENTAL OFFICE (912-767-3388 at FS OR 912-315-6287 at HAAF).” The name and number of the assigned Environmental Assessor should be included.

The following requirements apply to each UPP/SAP located at FS/HAAF:

- Must be located at or near the point of generation where the waste initially accumulates.
- Must be under the direct control of the waste generator, i.e. UPP/SAP HW Manager.
- The use of pods or tanks (with the exception of above-ground used oil storage tanks) is strictly prohibited for the storage of HW. Units/activities must collect and store HW in separate drums for each type of waste.
- Drums larger than 55 gallons in size must not be used.
- A maximum of 55 gallons of hazardous waste may be accumulated in the UPP/SAP, or 1 quart for any acute HW. The generator must mark the container holding the excess accumulation of HW with the date the excess amount began accumulated (40 CFR 262.34) however, generator must be diligent not to exceed the 55 gallon accumulation and will conduct a HW turn-in procedure to avoid the excess. Installation’s normal practice is no more than 55 gallons of HW accumulated.
- Small quantities of HW generated at workstations **MUST** be removed to the UPP/SAP at the end of each workday or at the end of each shift.
- If more than one waste stream is collected at a UPP/SAP, the generator must provide appropriate segregation.
- Each container must be clearly labeled with contents using the system specified by the IEC. **None of the labels used at the unit/activity level should have any provision recording a date.**
- Containers must be placed in such a way that markings and labels are clearly visible.
- Waste containers must remain closed at all times except when adding or removing waste. Funnels must be removed and caps/vents closed after use. A fixed, screwed on funnel may be used if it has a lockable lid that is kept closed.
- Drums of used oil should only be labeled “Recoverable Used Oil” and Jet-A/F-24 should only be labeled “Recoverable Off-Spec Jet-A/F-24.”
- Containers must be compatible with contents. Corrosives should be stored in heavy poly drums and flammables in steel drums or heavy poly drums. Containers greater than 5-gallons in size holding flammables must be grounded.
- Do not mix categories of waste.

- Liquid waste shall only be stored and transported in closed head drums. To prevent overflow due to expansion in hot weather, leave four (4) inches for headspace in 55-gallon drums. More headspace is needed for tanks.
- Do not allow residue to collect on top of containers.
- Be prepared for the possibility of spills. Have enough pads, absorbents, booms and dry sweep on hand to handle a worst case spill. Units/activities must have spill response material at every location where HM/HW is stored.
- Small spills (smaller than 5 gallons) must be cleaned up immediately by responsible party in accordance with established procedures. Reference Chapter 18.
- Large spills (5 gallons or larger) must be reported to the Fire Department at 911 and Environmental Office as required by this plan immediately after the responsible party has stopped the flow of spilled material and secured the area of the spill. Reference Chapter 18.
- All dispensing containers of ignitable material or containers of ignitable waste must be properly grounded.
- All personnel generating HW and/or managing a UPP/SAP must be trained. See Chapter 15 for training requirements.
- UPPs/SAPs must be inspected weekly by the unit/activity ECO/ECNCO or by the UPP/SAP assigned Environmental Assessor using the form provided in Appendix E, (Exhibit E-2). Check for leaks, expansion, dents, and excessive rust. The inspection must be documented and records must be readily available for review at all times.
- When a waste accumulation container is filled, it must be turned into the appropriate Hazardous Waste Storage Area, i.e. (Bldg #1157 at FS or Bldg #720 at HAAF) within three (3) calendar days.

NOTE: Weekends and holidays are included in the 72-hour time limit. In other words, generators should plan ahead and contact the IEC and/or applicable Hazardous Waste Storage Area (Bldg #1157 at FS or Bldg #720 at HAAF) when waste receptacles are three-quarters full to ensure regulatory compliance.

7.5 Hazardous Waste Storage Areas

There are two designated Hazardous Waste Storage Areas (HWSA) at FS/HAAF:

- **Fort Stewart (FS)** is permitted to operate a Treatment, Storage and Disposal Facility under RCRA and Georgia regulations as outlined in the Hazardous Waste Facility Permit #HW-045(S). The Hazardous Waste Facility is located at Bldg #1157 and its EPA ID

number is GA 9210020872. As a permitted facility, FS is allowed to store and treat hazardous waste in accordance with the conditions outlined in the permit and can store up to 124,800 gallons of hazardous waste in containers in Bldg #1157 for up to 365 days (40 CFR Part 265).

- **Hunter Army Airfield (HAAF)** is designated as a LQG under RCRA and Georgia regulations for operation of its 90-day accumulation site located at Bldg #720 and must comply with all LQG requirements. HAAF's EPA ID number is GA 4210022733. As a LQG, HAAF can generate at least 1000 kg (2,220 lb) of HW per calendar month and store the waste onsite for up to 90 days (40 CFR Part 262).

The HWSAs are managed by IEC. Units/activities will not operate a HWSA. If a mission or circumstance occurs that requires more waste accumulation capability than a UPP/SAP, contact the IEC for a HWSA consideration and approval.

HWSAs are designed to store unlimited amounts of HW for a specified amount of time. All HW stored/accumulated at a HWSA must be clearly marked with the accumulation start date. The following requirements must be met:

- For HW being accumulated at a HWSA, the accumulation start date is defined as the date that a waste was first placed into a collection container; or the date that a container already holding a HW is removed from a UPP/SAP and moved to the HWSA.
- Appropriate labels will be affixed to HW containers upon receipt at the HWSA.
- The accumulation start date will be clearly marked and visible for inspection on each container.
- Aisle space around each container should be at least three feet to allow unobstructed movement of personnel or the use of fire protection, spill control and decontamination equipment.
- Containers will be placed in the HWSA in such a way that container labels and markings are clearly visible.
- Incompatible wastes must be stored in separate containers and adequately protected/separated with a wall, berm, secondary containment, etc.
- All personnel working at the HWSA must receive training. See Chapter 15, Training Requirements, for more information.
- Storage areas must be equipped with a communications or alarm system capable of providing emergency instructions (voice or signal); a telephone or two-way radio; fire extinguishers, and fire and spill control equipment; and water at adequate volume and pressure or foam producing equipment.

- HWSAs must be secured to prevent unauthorized access when not in use.
- Storage areas for liquid HWs will have secondary containment with sufficient capacity to contain 10% of the volume of all containers or 100% of the volume of the largest container, whichever is greater.
- HWSA must be inspected weekly using the forms provided in Appendix E (Exhibits E-3 and E-4).
- HWSAs must be identified with the sign provided in Figure 7-1. The contact information must be updated whenever there is a change.
- Containers storing ignitable or reactive wastes must be grounded and located at least 50 feet from sources of ignition or spark-producing equipment and processes. “No Smoking” signs are required in these areas. These containers must also be located at least 50 feet from the installation boundary.
- Non-hazardous waste may be stored at HWSAs. Quantity and time limitations are not applicable, but all other management practices are required.

7.6 Training Exercise Support

The IEC will support provision of packaged POL products, HW collection containers and spill response supplies if coordinated in advance of the training exercise. The IEC will provide onsite assistance to set up a temporary UPP/SAP in your training location. The unit must contact their assigned inspector a minimum of 30 days out to coordinate support.

7.7 Deployment Closure of UPPs/SAPs

- The IEC will conduct onsite walkthroughs and consultations to assist units with motorpool closure prior to deployment, referred to as “Deployment Closeout.”
- All UPP/SAP wastes will be turned in prior to deployment. Spill kits will be stored in the UPP/SAP. The UPP/SAP lockers will be locked with the keyed locks provided by the IEC. The IEC will retain a key and maintain access to all UPPs/SAPs on FS/HAAF.
- If a rear element occupies an area vacated by a deployed unit and undertakes any activity involving HM or HW, that rear element will be subject to all established waste management procedures and requirements on FS/HAAF.

Figure 7-1. Hazardous Waste Storage Area Sign.

Hazardous Waste Storage Area Danger-Unauthorized Personnel Keep Out	
No Smoking or Flames Within 50 Feet	
Emergency Contacts:	
Fire	911
Medical Assistance	911
Activity Hazardous Waste Coordinators:	
<hr/>	
Primary and Phone Number	
<hr/>	
Alternate Name and Phone Number	

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CHAPTER 8 PETROLEUM, OILS, AND LUBRICANTS

Used petroleum, oil, and lubricant (POL) products such as motor oils, hydraulic fluids, diesel fuel, motor gasoline (MOGAS), and Off-Spec JP-8 must be disposed of in an efficient and environmentally safe manner. This chapter provides information and procedures for the proper management of used or waste POL products, including synthetic-based products.

8.1 Used POL Products

Used or waste POL products are recyclable materials, unless they are spilled, contaminated with HW, or determined no longer suitable for recycling. Waste fuel may be recycled if it is only contaminated with small amounts of water or solids, or mixed with other fuel types.

POL products mixed with any listed waste must be managed as a HW. To determine whether the POL is suitable for recycling, a representative sample must be collected and a waste analysis must be performed. Waste fuel contaminated with solvents may not be recycled but must always be managed as HW. Oil/water separator sludge is a potential HW and must be analyzed for a proper waste determination.

8.2 POL Accumulation Areas

The IEC is responsible for overseeing the collection of POL products. Unless otherwise addressed in Sections 8.3 and 8.5 of this chapter, used POL must be stored in designated containers as described in Section 8.4 of this chapter. Containers will be maintained in established UPPs/SAPs and managed accordingly to Chapter 7. Accumulation areas must be in compliance with the FS/HAAF Oil and Hazardous Substances Spill Prevention and Response Plan (SP&R Plan) and this plan. All spills that require being reported must be reported to the IEC and cleaned up in accordance with the requirements stipulated in the FS/HAAF SP&R Plan and Chapter 18.0 of this plan.

FS/HAAF personnel are required to report to the IEC any improper use of the collection facility that is observed (i.e., emptying used gasoline or paint into an oil container; or unnecessary spillage).

If a new accumulation site needs to be established, the generating unit/activity ECO/ECNCO or designated UPP/SAP HW Manager must contact the IEC for assistance.

8.3 Used Oil

There are no quantity restrictions for accumulating used oil. Containers should, at a minimum, be allowed four (4) inches of head space for possible contraction and expansion of the material. Tanks should be managed in accordance with UST/AST management requirements.

Units/activities at FS/HAAF that generate used POL products are responsible for placing a service order with the local contractor so they can pump out the containers/tanks. To place a service order, contact DPW service order section at (912) 767-2883. All used oil including other (synthetic-based) used POL products should be collected in aboveground storage tanks (ASTs) provided by the IEC. Used motor or gear oils of any weight (typically 30W, 15-40W, 40W, 80W, and 90W) should also be collected in the unit/activities AST.

ASTs are installed at numerous locations throughout FS/HAAF and will be inspected monthly by the assigned Environmental Assessor using Form 6 in the SPCC Plan. The location of these tanks is referenced in the FS/HAAF Oil and Hazardous Substances Spill Prevention and Response Plan. If the unit/activity does not have an AST, they must use a closed-head 55-gallon drum (preferably metal) for collection. If the unit/activity generates large quantities of used oil and needs an AST, contact the IEC at (912) 767-3388.

Those units/activities that drain and collect used engine oil are responsible for using non-leaking rigid containers to collect the oil, and to safely transport and empty the used oil into the specified larger collection containers in their area.

8.4 Other (Synthetic-Based) Used POL Products

Other (synthetic-based) used POL products, such as: brake fluid, FRH, turboshaft lubricant, Dexron II or III. etc., must be collected in Above Ground Storage Tanks (ASTs).

8.5 Off-Spec JP-8 Fuel

The following requirements apply to the storage of off-spec JP-8 fuel:

FS: Off-spec JP-8 fuel must be collected in closed-head 55-gallon metal drums painted red. These drums are to be labeled as “Recoverable Off-Spec JP-8.” These drums must be grounded. Once the drum is at least $\frac{3}{4}$ full the unit/activity must make an appointment to deliver the full drum to the Hazardous Waste Storage Area at Bldg #1157. Replacement drums will be issued at the time of turn-in.

HAAF: Off-spec JP-8 fuel must be collected in closed-head 55-gallon metal drums painted red. These drums are to be labeled as “Recoverable Off-Spec JP-8.” These drums must be grounded. Once the drum reaches at least $\frac{3}{4}$ full, the generating unit/activity must make an appointment to deliver the drum to the Hazardous Waste Storage Area at Bldg #720. Replacement drums will be issued at the time of turn-in.

Each generating unit/activity is responsible for maintaining an adequate number of appropriate containers for routine POL collection.

8.6 Empty POL Containers

Empty POL containers must be drained of all liquids. All containers (plastic and metal) up to, and including, 55-gallon drums will be recycled. Empty containers should be drained in an approved drain table and set aside for collection by HAZMART personnel; or (2) submitted to the appropriate Hazardous Waste Storage Area (Bldg #1157 at FS and Bldg #720 at HAAF) for inspection. Once containers are approved they will be turned-in to the recycling center for processing.

8.7 Labeling and Marking

Each container, drum, or AST used for the collection of Used/Waste POL products or Other (Synthetic-based) Used POL products must be marked with the following information:

- A description of the waste such as “Recoverable Used Oil”, “Non-Hazardous Used Synthetic Oils”, or “Non-Hazardous Used Mineral Oil.”
- If collection traps or fill lines are used to transfer oil into the AST, these visible lids/lines must also be labeled with “Used Oil.”

Each container, drums, or AST used for the collection of Off-Spec JP-8 or used fuel products must be marked with the following information:

- A description of the waste such as “Recoverable Off-Spec JP-8” or “Hazardous Off-Spec MOGAS.”

NOTE: Containers holding ignitable wastes MUST be grounded.

8.8 Transportation and Disposal

Used/waste POL's generated by units/activities will be transported by the generator for turn-in to the FS Hazardous Waste Storage Area (HWSA) (Bldg #1157), or the HAAF HWSA (Bldg #720). The used/waste POL products transported to the FS or HAAF HWSA's will be transferred/sold to recycling contractors or disposed of IAW with the provisions of this plan and established contracts. HW generating units/activities must do the following before transporting used/waste POL's or at the time of turn-in to their HWSA:

- Make an appointment for turn-in in compliance with the provisions of Chapter 11 of this plan.
- Transport used/waste POL's in compliance with the provisions of Chapter 13 of this plan.
- For the turn-in of bulk quantities (any amount in excess of 55 gallons in a single container) of a contaminated commodity (most often JP-8) generators must present at the time of turn-in at a HWSA an acceptable certificate of contamination (of the commodity) issued by a recognized testing activity at FS or HAAF.

For turn-ins of bulk quantities of “off-spec JP-8” generators must at the time of turn-in present:

1. A DA Form 2077, “Petroleum Products Laboratory Analysis Report” completed by the fuel testing lab operated by 260 QM at HAAF. This report’s entry for “Date tests completed” must be within 15 days of the turn-in date; the amount of fuel being presented for turn-in must be within 100 gallons of the entry for “Amt product sample represents”; the bumper number of the vehicle/equipment brought to the HWSA must agree with the entry on the form for “Source of sample (truck, tank, aircraft, etc); and the form’s entry for “Lab report no” must agree with the report number provided by the generator to the HWSA at the time the turn-in appointment is made. The DA Form 2077 must state that the sampled fuel is “not suitable for use” or words to that effect.

AND:

2. A Defense Fuel Supply Point, HAAF Fuel Disposition Form (see Exhibit E-7) completed by the Fuel Supply Point and countersigned by the generator. The Fuel Disposition Form’s entries for “Unit,” “Vehicle Number,” “Quantity Rejected” and “DA Form 2077 Lab Report Number” must agree with the appropriate entries on the accompanying DA Form 2077. The Fuel Disposition Form must be dated by the Fuel Supply Point within 10 days of the turn-in date, and it must state that the fuel was rejected for at least one of the reasons listed under the heading “Non Correctible Discrepancies.”

The HWSA will not be able to accept a bulk “Off-spec JP-8” turn-in if the generator fails to meet any one or more of the requirements stipulated immediately above.

Generators, regardless of their facility location, after having met the above requirements for the turn-in of bulk “Off-spec JP-8” may arrange for the turn-in at either HWSA (Ft Stewart or HAAF), whichever is more convenient.

8.9 Spill Residues

All spill residues contaminated with POL’s must be collected, stored, and disposed of as HW. Rags contaminated with POL’s will be managed IAW Chapter 9, Management of Specific Waste Streams.

CHAPTER 9 MANAGEMENT OF SPECIFIC WASTE STREAMS

This chapter identifies wastes routinely generated by FS/HAAF units/activities and provides brief descriptions on how to manage them. Detailed HW identification and management procedures are discussed in Chapter 7, Hazardous Waste Management, see section 7.3 for specific labeling and marking instructions. Waste turn-in procedures are provided in Chapter 11, Hazardous Material/Hazardous Waste Turn-In Procedures.

9.1 Aerosol Cans

All empty or unserviceable aerosol cans, regardless of their original contents, must be treated as HW by all FS/HAAF units/activities. Aerosol cans that are empty but not punctured may still be under pressure. Remove tops and spray nozzles. Empty cans and cans with remaining residual product must be collected in a 55-gallon metal drum with a specially modified lid available from the IEC. The 55-gallon drum must be labeled with the words “Non-Hazardous Used Aerosol Cans.” Aerosol cans must be turned into applicable Hazardous Waste Storage Areas (Bldg #1157 at FS) and Bldg #720 at HAAF) where they will be punctured and drained by IEC personnel using a device specifically designed to puncture the aerosol can and collect the residue in an appropriate container. Empty aerosol cans are then recycled as scrap metal. Units/activities must never attempt to puncture aerosol cans under any circumstances! The IEC will characterize the collected HW residual from its can puncturing devices and manage it according to the waste characterization.

9.2 Absorbents

Absorbents contaminated with solvents. This category includes dry sweep, vermiculite, and similar products that have been contaminated with solvents. Absorbents that have been contaminated with solvents must not be disposed of in any trash container. Generating units/activities must collect the solvent contaminated absorbent in a 55-gallon drum and manage it as a HW. The drum must be kept closed at all times unless waste is being added to the container. The drum must be labeled and marked as “Hazardous Solvent Contaminated Absorbents.”

Absorbents contaminated with POL products. This category includes dry sweep, vermiculite, and similar products contaminated with POL products. Absorbent pads, socks, booms and rags contaminated with oil, JP-8 or other POL products, such as grease or CLP, must be containerized and turned into the Hazardous Waste Facility (Bldg #1157). Collect the POL contaminated absorbents in a 55-gallon drum. DO NOT dispose of any of these materials in any trash container. Label the drum with the words “Non-Hazardous Used Booms and Socks”.

9.3 Adhesives and Sealants

The most commonly used adhesives, sealants and sealing compounds include epoxy, resins, silicone, polyurethanes, and glues. All adhesives and sealants are to be treated as HW. When

the generating unit/activity determines that the adhesives are no longer needed for their intended purpose, the unit/activity must containerize adhesives by NSN number and turn into applicable Hazardous Waste Storage Area for disposal.

9.4 Animal Carcasses

Animal carcasses generated during military training exercises, or those animals that have been euthanized by installation veterinary services are to be taken to the landfill. The following requirements apply:

- Animal carcasses must be placed into a sealed plastic bag that is non medical and transported to the landfill for disposal.
- Generator must notify the landfill operator one hour prior to drop off at (912) 767-3523.
- Landfill operator will cover the load with dirt to control odor, birds, insects and vermin.

Animal carcasses found at the side of the road, i.e., “road kill” will be taken to the wood line, or to the landfill, or to designated dumpsters at the Pass and Permit check station.

9.5 Antifreeze/Coolant

Used antifreeze/coolant is not classified as a HW and will be recycled. If it has been mixed with other wastes such as solvents or fuels, it must be managed as HW. Collect the used antifreeze/coolant in a closed-head 55-gallon green metal drum labeled “Recoverable Used Antifreeze” and turn into the Hazardous Waste Facility for recycling.

9.6 Asbestos

Asbestos containing waste, i.e., asbestos or asbestos containing material (ACM), can only be disposed of in a permitted landfill or other facility authorized by GAEPD for acceptance of asbestos containing waste. Asbestos containing waste shall be sealed in leak-proof containers labeled with “Caution – Contains Asbestos Fibers – Avoid Opening or Breaking Container – Breathing Asbestos is Hazardous to Your Health.”

The FS landfill is authorized to accept asbestos containing waste for disposal. Asbestos containing waste can be taken to the FS landfill for disposal after completing a Waste Shipment Record (i.e., Asbestos Manifest). A copy of the Waste Shipment Record is located in Chapter 11, Figure 11-3. The completed Waste Shipment Record must accompany the load to the landfill. Additional guidance and instruction can be obtained by contacting the IEC at (912) 767-2010. Asbestos containing waste shall be disposed of in a manner as not to destroy the integrity of the ACM containers prior to the placement of cover material in the landfill.

NOTE: The permitted Hazardous Waste Facility at FS (Bldg #1157) does not accept asbestos or ACM; however, personnel at this facility will weigh, bag and assist with preparation of the

Waste Shipment Record (i.e., Asbestos Manifest) needed by the generating unit/activity for disposal at the FS landfill.

9.7 Batteries

Batteries on FS/HAAF are managed as HW in accordance with the universal waste regulations. Universal Waste labels will be applied by the IEC at the HWSA. Batteries used at FS/HAAF include: alkaline, magnesium, lithium/sulfur dioxide, lead-acid, nickel-cadmium (NiCad) and mercury. All batteries at FS/HAAF **MUST NOT BE ACCUMULATED FOR ANY PERIOD LONGER THAN SIX MONTHS** before turning into the applicable Hazardous Waste Storage Area (Bldg #1157 at FS or Bldg #720 at HAAF). A six-month turn-in record is used by IEC to comply with the universal waste tracking requirements. The “Universal Waste Tracking Log” records the date the unit turned in the batteries and when the batteries left the HWSA for recycling.

All personnel who use, handle, maintain and/or store batteries shall take the following precautions:

- Do not incinerate, crush or mutilate.
- Do not charge a non-rechargeable battery.
- Do not drain electrolyte from a sealed or vented lead-acid battery unless the case is cracked and the electrolyte is leaking.
- Collect the various types of batteries in separate containers and ensure that the containers are compatible for the type of batteries. Pre-labeled containers can be obtained from the IEC at (912) 767-4634.
- Units/activities will use labels provided by the IEC for battery collection containers.
- All batteries will be discharged if possible, vent holes taped over and anodes taped over prior to turn-in at the HWSA.

Lead-Acid Batteries. The following special requirements apply:

- Lead-acid batteries must be stored off the ground/pavement and on a pallet.
- Batteries must be stacked no more than two layers high. The two layers must be separated by a non-conductive layer, typically plywood or heavily corrugated cardboard. This prevents accidental arcing across terminals of any batteries still possessing a charge.
- All caps must be in place or otherwise the holes must be plugged.
- Battery storage must be protected from the weather. Protect batteries and electrolyte from freezing.

- Separate storage of serviceable batteries from non-serviceable batteries.
- Do not place batteries or electrolyte in a metal container when preparing items for disposal.
- Undamaged lead-acid batteries should be collected and turned in to the unit/activities DS organization for DX.
- Lead-acid batteries that are leaking or otherwise damaged must be managed as a HW in appropriate collection containers. Collect these batteries in areas that are protected from the environment and store them in secondary containment. Batteries should be containerized, strapped to a pallet and turned into the appropriate Hazardous Waste Storage Area.
- Battery acid must be containerized in a plastic drum and turned into the applicable Hazardous Waste Storage Area for disposal.
- If electrolyte spills, do not touch without wearing personal protective clothing. Clean up the spill by treating the electrolyte with a base such as sodium bicarbonate (baking soda) to neutralize the acid, then recover with a dry absorbent. Notify the HWSA at (912) 767-3388.
- Do not drain the batteries.
- Keep them covered.

Lithium/Sulfur Dioxide Batteries. The following special requirements apply:

- DO NOT ACCUMULATE LITHIUM BATTERIES FOR ANY PERIOD LONGER THAN SIX MONTHS before turning into the applicable HWSA.
- Batteries with a hissing sound (i.e., battery venting) or an irritating smell of rotten eggs should be removed from equipment and placed in a well-ventilated area. If unable to remove battery from equipment, leave area and notify the IEC.
- Discharged properly, vented batteries must be kept dry.
- Batteries with a full discharge should be containerized in a 55-gallon plastic drum labeled “Non-Hazardous Used Lithium Batteries.”
- Batteries without Complete Discharge Device (CDD) should be kept dry, containerized and turned-in as hazardous waste.
- Batteries should be collected in an appropriate container provided by the IEC and labeled with the words “Non-Hazardous Used Lithium Batteries.”

Magnesium Batteries. The following special requirements apply:

- DO NOT ACCUMULATE MAGNESIUM BATTERIES FOR ANY PERIOD LONGER THAN SIX MONTHS before turning into the applicable HWSA.
- Batteries must be kept dry and segregated from other types of batteries (i.e., lithium, mercury, NiCad).
- Batteries must be containerized in a 3 ½ -gallon sealable plastic tub (or acceptable alternative) labeled “Hazardous Used Magnesium Batteries.”

Mercury Batteries. The following special requirements apply:

- DO NOT ACCUMULATE MERCURY BATTERIES FOR ANY PERIOD LONGER THAN SIX MONTHS before turning into applicable Hazardous Waste Storage Area.
- Batteries must be kept dry and segregated from other types of batteries (i.e., lithium, mercury, NiCad).
- Batteries must be containerized in a 3 ½ -gallon sealable plastic tub (or acceptable alternative) labeled “Hazardous Used Mercury Batteries.”

Nickel/Cadmium (NiCad) Batteries. The following special requirements apply:

- DO NOT ACCUMULATE NI-CAD BATTERIES FOR ANY PERIOD LONGER THAN SIX MONTHS before turning into applicable Hazardous Waste Storage Area.
- Batteries must be kept dry and segregated from other types of batteries (i.e., lithium, mercury, magnesium).
- Batteries must be containerized in a 3 ½ -gallon sealable plastic tub (or acceptable alternative) labeled “Non-Hazardous Used NiCad Batteries.”
- If nickel/cadmium electrolyte is spilled, do not touch without wearing personal protective clothing. Clean up the spill with dry absorbent. Notify the HWSA at (912) 767-3388.

Special precautions for battery storage and disposition are listed in Table 9-1, Battery Quick Reference Table. Additional guidance regarding the disposition and disposal of batteries is stipulated in Technical Bulletin (TB) 43-0134, Battery Disposition and Disposal.

Table 9.1 Battery Quick Reference Table

Battery	Associated Hazards	Packaging	Special Requirements
Alkaline BA-3XXX/U	Potassium hydroxide	No packaging required.	Collect, place tape over both ends and turn-in to recycle facility (Bldg. 1143)
Lead-Acid BA-XXXX	Sulfuric acid Lead and salts	Undamaged batteries are to be banded securely to a pallet with electrolytes and caps in place. Damaged batteries are to be containerized and turned into applicable Hazardous Waste Storage Area.	Protect from freezing. Stack no more than two layers high. Plug holes if caps are missing. Tape over all terminals.
Lithium-Sulfur Dioxide BA-5XXX/U	Pressurized cells contain sulfur dioxide Lithium metal	Package damaged and undamaged batteries separately in suitable containers for transport.	Discharge and vent batteries with CDD prior to disposal. Label "Non-Hazardous Used Lithium Batteries." Tape over all connectors.
Magnesium BA-4XXX/U	Generates hydrogen	Package batteries in a suitable container for transport, i.e. 3 ½ gallon container provided by IEC.	Label "Non-Hazardous Used Magnesium Batteries." Tape over all connectors.
Mercury BA-1XXX/U	Potassium hydroxide Mercury and mercury salts Generates hydrogen gas	Package batteries in a suitable container for transport, i.e. 3 ½ gallon container provided by IEC.	Label "Non-Hazardous Used Mercury Batteries." Tape over all connectors.
Nickel-Cadmium BB-XXXX	Potassium Cadmium and cadmium salts	Package batteries in a suitable container for transport, i.e. 3 ½ gallon container provided by IEC.	Label "Non-Hazardous Used Ni-Cad Batteries." Tape over all connectors.

9.8 Blasting Media

Includes abrasives such as sand, walnut shells, crushed glass, steel shot, and aluminum oxide to clean metal parts. This media has to be replaced periodically because it is no longer usable. Do not discard the spent media as SW before obtaining a proper waste characterization profile. Collect the material in an appropriate container(s) and mark it with the words “Spent Blasting Media, Awaiting Analysis.” Date the container with the date the blast media was placed into the container. Ensure container lid remains closed. Contact the IEC for waste characterization assistance.

9.9 Contaminated Fuel

Includes fuels such as JP-8, JP-5, and MOGAS contaminated with HW. Collect the fuel in appropriate containers with tight fitting lids and turn in to the permitted HWSA. Place a label on the container(s) and mark them with the words “Recoverable Contaminated Fuel.”

9.10 Contaminated Soil

In addition to contaminated soil, this category includes “used up” dry sweep or other absorbent compounds. Contaminated soils are managed as follows:

FS: Contaminated soil is treated as HW and SHOULD NOT BE DISPOSED OF IN ANY TRASH CONTAINER. Contaminated soils in small amounts (55-gallons or less), and not saturated, can be bagged or drummed and transported to the permitted HWSA at Bldg #1157 for turn-in and disposal. For large amounts, coordinate with the IEC at (912) 767-4634 for clean-up and off-post disposal.

HAAF: Contaminated soil is treated as HW and SHOULD NOT BE DISPOSED OF IN ANY TRASH CONTAINER. Contaminated soils in small amounts (55-gallons or less), and not saturated, can be bagged or drummed and transported to the permitted HWSA at Bldg #720 for turn-in and disposal. For large amounts, coordinate with the IEC at (912) 315-6287 for clean-up and off-post disposal.

9.11 Compressed and Liquefied Gases

Compressed and liquefied gases are defined as follows:

- **Compressed gas** is any material or mixture in a container having an absolute pressure greater than 40 pounds per square inch (psi) / 25 pounds psi gauge at a temperature of 70 degrees Fahrenheit.
- **Liquefied gas** is a gas that, under the charged pressure, is partially liquid at a temperature of 70 degrees Fahrenheit.

The following requirements and guidelines for storage, handling, and use of compressed gas cylinders apply:

- All new, reconditioned, or refilled cylinders received from a commercial supplier shall be inspected when received to determine that they are in good physical condition, properly painted, marked and labeled.
- Cylinders must be kept away from excessive heat and stored in a well-protected, well-ventilated, dry location.
- Oxygen and other oxidizers must be separated from flammable gases or combustible materials by a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high with a fire-resistance rating of at least one-half hour.
- All gas cylinders shall be stored in a valve-end upright position and in a location and manner to preclude being knocked over or damaged by passing or falling objects, i.e., secure cylinders in the upright position with brackets, chains or straps around the upper third of the cylinder.
- Empty cylinders shall be clearly marked and stored apart from charged (full) cylinders.
- A leaking cylinder shall be moved outdoors or placed under an exhaust ventilation system suitable for evacuating released gases. Use appropriate personal protective equipment (PPE) when handling a leaking cylinder.

Contact the applicable HWSA or the IEC for guidance regarding the storage, management and disposal of compressed gas cylinders (full and empty). The following requirements apply to the disposal of empty cylinders:

- When empty, cylinders are to be marked “EMPTY” using a tag or chalk.
- The valves shall be closed, and the valve protection cap installed.
- Cylinders are the property of the gas supplier.
- Empty cylinders shall be traded for full ones with the gas supplier on a one-for-one basis.
- Non-refillable/non-returnable cylinders shall be disposed of as scrap metal after the valve and any residue is removed.
- Do not vent partially filled refrigerant containers to the atmosphere. Attach the container to certified refrigerant recovery equipment and remove remaining refrigerant. When the container has been reduced from a pressure to a vacuum of four (4) inches of mercury, the container valve can be closed. Mark the container “EMPTY” and remove the valve prior to turn-in to the DRMO scrap metal section (x 8893).

9.12 Corrosion Protection Products

Corrosion protection products are to be treated as HW. When the generating unit/activity determines that the corrosion protection products are no longer needed for their intended purpose, the unit/activity must containerize products by NSN number and turn into applicable HWSA (Bldg #1157 at FS and Bldg #720 at HAAF) for disposal.

9.13 Dental Amalgam

Collect waste amalgam in appropriate collection containers which have a tight fitting lid. Mark the containers with the words "Hazardous Waste - Amalgam." Amalgam must be in a dry state for disposal purposes; do not purposely "wet" or suspend the amalgam in a solution.

9.14 Infectious Waste

See Chapter 10, Regulated Medical Waste for specific waste management procedures.

9.15 Fuel Filters

Used fuel filters may be HW based on ignitability or toxicity characteristics and must be segregated at all times from oil filters. Used fuel filters will be drained, crushed if possible, and collected in open-head 55-gallon drum(s). The collection drum must be grounded and labeled with the words "Non-Hazardous Used Fuel Filters". When the drum is full, the unit/activity must turn the drum into the applicable HWSA (i.e., Bldg #1157 at FS and Bldg #720 at HAAF) for disposal. The used fuel must be managed as described in Chapter 8, Petroleum, Oils, and Lubricants.

9.16 Lamps

With the exception of incandescent light bulbs, this category includes all lamps such as fluorescent lamps, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide. Fluorescent lamps contain toxic metals such as mercury, cadmium and lead. It is a common misperception that "green-tipped" or "environmentally friendly" lamps do not contain mercury. While these lamps do contain less mercury and are considered to be the environmentally preferable alternative, it is the policy of FS/HAAF to collect these lamps for disposal and/or recycling to prevent releases of mercury to the environment. Used lamps on FS/HAAF are managed as HW in accordance with the universal waste regulations. Universal waste labels will be applied by the IEC at the HWSA. The IEC will utilize a Universal Waste Tracking Log that records the date of turn-in. The following requirements apply to the management of fluorescent lamps:

- All fluorescent lamps must be kept intact and collected in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps.
- Keep containers and packages of spent lamps closed. Closed means the box lid is taped shut or the container lid (if plastic or metal) is securely fastened.
- DO NOT THROW lamps in trash receptacles.
- Label lamp containers with a Universal Waste label.”
- DO NOT ACCUMULATE spent lamps for more than 6-months.
- Best Management Practices (BMPs) for Lamp replacement at Unit level is as follows: Contact TFW work order section @ 767-2883 for replacement of Lamps or in the case of utilizing the “Self Help Shop” they will do a one for one replacement. NO EXCEPTIONS!

9.17 Laboratory Chemicals and Reagents

Wastes from laboratories generally consist of no longer needed or outdated chemicals and reagents. Quite frequently the quantities of each item are small; however, constituents can be hazardous or even toxic. Due to unusual nature of these wastes, the waste generator or the UPP/SAP HW Manager shall contact the IEC or DRMO for information on how to package, mark and document these wastes for turn-in.

9-18 Medical Supply/Treatment Items (Non-Infectious)

Medical, dental and veterinary supply items that are no longer serviceable must be reported through medical supply channels. The MEDDAC will assist mission assets with turn-in/disposal classifications. Some items may require HW management. Pharmaceuticals must be turned into a DLA sponsored contractor either through the MEDDAC contractor or on a separate contract.

Contact the MEDDAC, Logistic Material QC Technician, Ms. Angie Boatwright at (912) 435-6319.

9.19 Munitions and Ordnance and Propellant, Explosive and Pyrotechnic (PEP)

The 38th Ordnance Detachment manages all Explosive Ordnance Disposal (EOD) Operations at FS/HAAF. To obtain additional information and instruction regarding EOD contact the 38th Ordnance Detachment at (912) 767-8717. The DOL Ammunition Supply Point (ASP) manages ammunition serviceability, storage, and transportation programs, (912) 767-8481.

The ASP issues munitions and ordnance using on automatic return list and accountability issue document. Several smoke pots used on FS/HAAF have been characterized as HW. Units are

directed when issued the items that require return to ASP. Once returned and inspected, the ASP manages identified range waste in accordance with HW requirements. DA Form 581 is used as the turn-in document.

Munitions and ordnance are not considered waste as long as they are within their life cycle and are able to be used for their intended purpose, including training exercises. Munitions and ordnance are not waste if they are:

- Serviceable;
- Not serviceable, but safe to handle and store, and accounted for with serviceable munitions and ordnance;
- Subject to DOD management and control procedures at least as strict as procedures for munitions and ordnance in active service; and
- Military munitions or ordnance which is reworked, by the Army, to meet original or alternate specifications for reuse.

Are Munitions and Ordnance Classified as Waste? The Directorate of Logistics at the Ammunition Supply Point (ASP) is the only authority authorized to classify munitions and ordnance as waste.

The following are examples of materials designated as wastes:

- Materials transferred to a commercial waste handler.
- Residues from open detonation or other thermal treatment.
- Items generated by any method which transforms munitions and ordnance materials no longer subject to Army management and control.
- Propellant, explosives, and pyrotechnic materials (PEP) and munitions manufacturing by-products, such as line rejects, off-specification items, and wastewater contaminated with explosives.

Declaring Munitions and Ordnance Prior to Demilitarization. In special circumstances, military munitions and ordnance could be declared a waste before demilitarization. MACOMs are required to justify this declaration to HQDA (DALO-SMZ) WASH DC 20310-0540 for approval. After approval is given and formally conveyed to MAC OM, the material is to be managed according to applicable Federal, state, and Army regulations and policies.

Munitions and Ordnance Disposal Operations. Munitions and Ordnance Disposal Operations are performed in accordance with FS Subpart X Permit and are accomplished by contacting the IEC.

Exempted Activities. The following activities are exempted from hazardous waste management requirements but must be completed in accordance with AR 385-64.

- Explosive ordnance disposal (EOD) associated with training, emergency operations, and range clearance operations.

Emergency EOD operations are non-routine and are conducted to correct problems which present an imminent and substantial threat to public health, safety, or property, as

defined in AR 75-14 and AR 75-15. If an EOD operation extends beyond an immediate response, and a RCRA permitted or interim status facility is not available, a RCRA emergency permit is required.

- Open burning/open detonation (OB/OD) training activities on training ranges, impact ranges, firing ranges, or equivalent.

Examples of training activities include training of EOD personnel, training soldiers to fire/operate weapons and weapon systems, and training fire-fighting personnel at fire training pits.

- Burning excess propellant bags/increments used in training. Burning can be performed at firing points, or at designated areas on ranges. To ensure environmentally sound practices, the materials should be burned in pans whenever possible. Residues from both the pans and the ground (if any) must be analyzed periodically to determine if they are a hazardous waste as defined in 40 CFR Part 261, and must be managed accordingly.
- Fire training exercises.
- Installation range clearance operations of conventional ordnance in accordance with AR 385-63.
- Clearance operations of conventional ordnance from private lands which were once under military control.

RCRA Corrective Actions at Range Clearing Operations. For corrective actions regarding RCRA range clearing, call the DOL ASP Manager at (912) 767-8481.

Disposal of Obsolete or Off-Specification Small Arms Ball Ammunition. Obsolete or off-specification materials that are both DOT Class C and Type 1.4 (small arms ball ammunition of calibers up to and including 0.50) are not reactive according to the RCRA definition. The disposal of this type of ammunition is not subject to Federal hazardous waste management requirements.

DOD and Army Regulations Regarding the Handling of Munitions and Ordnance. DOD and Army regulations governing transportation, storage, maintenance, inspections, safety, and security in handling of munitions and ordnance provide maximum protection for personnel and the environment. Strict adherence to DOD and Army regulations in support of Army missions is mandatory.

Explosive Ordnance and Propellant, Explosive and Pyrotechnic (PEP) Materials. For information regarding these types of munitions, call the 38th EOD at (912) 767-8717. Army Regulations AR 75-1, AR 75-14, AR 75-15, AR 385-60, AR 385-64, along with the AR 755 series give guidance for disposal of PEP materials.

9.20 NBC Wastes

NBC wastes are classified as non-hazardous or hazardous depending upon the type of kit or filter. Some NBC kits contain alcohol and other potential reactive chemicals. NBC wastes, such as M295 and M291E decontamination kits are classified as non-hazardous waste. NBC wastes, such as C2A1 filters, M256A1 and M258A1 decontamination kits are classified as HW and must be managed accordingly.

The following requirements apply to the storage and disposal of NBC wastes:

- An ECO/ECNCO must be appointed to oversee this area.
- NBC wastes are to be collected and managed at the company level within the unit.
- NBC waste accumulation areas must be secured from unauthorized access.
- NBC waste collection areas must be inspected weekly.
- NBC wastes must be collected in pre-labeled containers (at least 5-gallon buckets or suitable alternative) provided by the IEC. Four containers will be needed by the unit/activity in order to segregate NBC waste as follows:
 - C2 filter canisters,
 - C2A1 filter canisters,
 - M256/M258 chemical agent detector kits, and
 - M291/295 chemical decontamination kits.
- Each container must be appropriately labeled for contents, i.e., “Hazardous Used C2A1 NBC Filter,” “Hazardous Used C2 NBC Filters,” or “Hazardous Used M256 NBC Kits.”
- NBC containers must be closed (sealable lids).
- NBC kits that have been opened, during training or real use, must be considered HW whether or not they have been used.

9.21 Oil Filters

Used oil filters are not a HW, unless they are terne-plated, but they must be managed properly. Oil filters must be gravity hot drained IAW Title 40 CFR 261.4(b) (13) using the following techniques:

- Puncturing the anti-drain back valve or dome end.
- Crushing.
- Dismantling or using any other method that will remove oil from the filter.

The EPA clarifies gravity hot draining as draining the oil filter near engine operating temperature and above room temperature for a minimum hot drain time of 12 hours. If an oil filter is picked up by hand or lifted by machinery and used oil immediately drips or runs from the filter, the filter should not be considered drained.

Used oil filters will be drained, crushed if possible, and collected in open-head 55-gallon drum(s) labeled “Non-Hazardous Used Oil Filters.” When the drum is full, the unit/activity must turn the drum into the applicable HWSA (i.e., Bldg #1157 at FS and Bldg #720 at HAAF). The used oil must be managed as described in Chapter 8, Petroleum, Oils, and Lubricants. The IEC will manage the filters as solid waste or recyclable waste.

9.22 Ozone Depleting Substances

Ozone depleting substances include fully-halogenated chlorofluorocarbons (CFCs) and halocarbons containing bromine (halons). These substances are regulated by the EPA and are most commonly used in aerosol cans and air conditioning/cooling units (i.e. refrigerants). Neither substance is immediately hazardous; however, if released to the atmosphere contribute to ozone depletion. The following requirements apply:

- Class I and Class II refrigerants shall not be vented to the atmosphere.
- Units/activities must report any releases to the IEC.
- Used refrigerants shall be captured using approved recovery equipment. Consult the IEC for information regarding acceptable recovery units and ODS disposal procedures.

9.23 Paints

There are three types of paint: CARC, Oil and Solvent Based, and Latex (water-based). These paints may be found in one of three physical states: (1) “liquid; (2) “squishy” (defined as a liquid paint in which a semi-solid film has formed on the top); and (3) “hard,” i.e. dried to solid form.

All used or excessive paint found in a “liquid” state must be treated as HW.

CARC/ W/D/CARC. Chemical Agent Resistant Coating (CARC) and Water Disbursed Chemical Agent Resistant Coating (W/D CARC) paint must always be treated as HW in any physical state. The following requirements apply:

- CARC/ W/D CARC paint is to be containerized and turned into the applicable HWSA (Bldg #1157 at FS and Bldg #720 at HAAF) for disposal.
- CARC/ W/D CARC paint residue, rags, rollers, etc. are also treated as HW and must be containerized and turned into the applicable HWSA for disposal.

Oil and solvent based. Includes paints such as enamels, lacquers, shellac, and varnishes. Oil and solvent based paints are always treated as HW when they are in a “liquid” or “squishy” physical state. The following requirements apply:

- If the paint has fully hardened, replace the lid and dispose of in the general trash. NOTE: Oil and solvent based paints are only safe for disposal as a municipal waste when they are “rock-solid.” This means the oil and solvent have already evaporated from the paint.

Purposely allowing oil and solvent based paint to dry and discarding it as SW is not a permitted practice.

- If the paint is still in a “liquid” or “squishy” physical state, place lids on cans, containerize the paint cans and turn them into the applicable HWSA for disposal. Units/activities must collect these paint cans in an appropriate collection container keeping the lid closed at all times unless waste is being added. Collection containers must be labeled or marked with the words “Hazardous Used Paint.”

Water based (Latex). Includes paints identified on the label as water-based paint or latex paint. Water-based paint may be discarded as SW if it is completely dry and contains no free liquids, i.e., latex paint is only safe for disposal as a municipal waste when it has become hardened. Latex paints in a “liquid” state are always considered to be hazardous. The following requirements apply:

- **Small Quantities** – If paint cans contain a small quantity of free liquid, units/activities may mix the liquid with soil or dry sweep until the liquid becomes congealed. Replace the lid and dispose of with the general trash.
- **Large Quantities** – If paint can is more than ½ full, or if the unit/activity has large quantities of liquid paint, the generating unit/activity must coordinate disposal with the applicable HWSA.

NOTE: The “squishy” physical state becomes relevant in the case of latex paint when there is less than ½ can of latex paint. Units/activities that want to go through the trouble may add floor dry sweep to the can to achieve the consistency of putty. Once the consistency of putty has been achieved, the lid must be replaced, and the can may then be disposed of as a municipal waste.

9.24 Paint Related Material

Paint related material includes paint thinners, drying agents, reducing compounds, and paint removers used in painting operations. This category also includes paint booth filters. All paint related material must be managed as HW. Collect the spent material in containers that are compatible with the products and turn into the applicable HWSA (Bldg #1157 at FS and Bldg #720 at HAAF). Label as “Hazardous Used Paint Related Material.”

9.25 Photographic Wastes

Hazardous Photographic Waste. Used fixer solutions resulting from x-ray and photo processing contain silver particles, causing the solution to be a hazardous waste. The silver is precious metal that can and must be recovered IAW DoD 4160.21-M, Chapter 11 by all activities in the Army that produce such wastes.

Silver Recovery Equipment. Commercially produced silver recovery units shall be procured by each agency at FS/HAAF that operates a photo processing facility and installed to permit the recovery of silver on a continuing basis. The IEC should be contacted for information regarding this equipment and its use.

NOTE: Silver recovery effluent should be characterized as non-hazardous through periodic testing and discharged to the sanitary sewer.

Photo processing and/or silver recovery effluent containing silver concentrations in excess of TCLP and Waste Water Treatment Plant limits are HW. Turn HW effluent into the applicable HWSA. Use drums (plastic) provided by the IEC.

9.26 Radioactive Wastes

Radioactive wastes are managed by the Installation Safety Office. For guidance and assistance, call (912) 767-7880.

9.27 Rags

Contaminated with POL products. Includes pads and rags used to clean up POL spills and wipe equipment. Collect POL contaminated rags in a 55-gallon drum and manage them as HW. Label the drum with a standard label provided by the IEC reading “Non-Hazardous Used Rags.” Reusable towels or rags contaminated with POL products may be laundered by a commercial laundry facility. Contact the IEC for assistance if self-laundering is to be conducted as some rags may be too heavily saturated to permit POL residue to be discharged into the sanitary sewer.

Contaminated with solvents. Includes pads and rags used to clean up spills and wipe equipment. Collect solvent contaminated rags in a 55-gallon drum and manage them as HW. Keep the drum closed at all times unless waste is being added to the container. Container must be labeled or marked with the words “Hazardous Used Solvent Contaminated Rags.”

Reusable towels or rags contaminated with characteristic or listed solvents that are being laundered by a commercial laundry facility do not need to be managed as a HW. If an organization wishes to self-launder solvent contaminated rags, contact the IEC for assistance as this could be considered treatment of a HW.

9.28 Regulated Medical Waste

See Chapter 10, Regulated Medical Waste for specific waste management procedures.

9.29 Solvents and Degreasers

Solvents are liquids produced in a variety of formulations that are commonly used to clean metal and electrical parts and equipment. This category includes acetone, xylene, toluene, tetrachloroethylene (TCE), methylene chloride, methyl ethyl ketone, etc., used in cleaning, stripping, and degreasing operations. Solvents and degreasers should be collected in containers that are compatible with the chemicals. The container should remain closed at all times, except during the loading and unloading of parts.

All units/activities at FS/HAAF should only be using filtered parts washers that have been standardized to one manufacturer and model (Clarus Technologies, PCS-25). Only Milspec

PRF-680 solvent, acquired through the HAZMART, is authorized for use in these washers. It is important that these parts washers not be contaminated with other types of solvents, thinners, paints, or fuels. Mixing the PRF-680 solvent with other products will make its disposal more difficult and costly. Drain solvent into the original drum and turn it into the applicable HWSA for disposal. The container should be labeled and marked as “Hazardous Used PRF 680.”

The following items pertain to operation of the Clarus parts washers:

- Equipment must be monitored every 30 days.
- A log must be maintained by the generating unit/activity.
- The IEC will monitor solvent usage once every six (6) months.
- When the filter screen reaches 40 psi, the filter must be replaced. Filters are maintained by the IEC. Contact your designated IEC Environmental Compliance Inspector for assistance.
- Solvent is not replaced unless authorized by the IEC. Contact your designated IEC Environmental Compliance Inspector for assistance.
- The parts washer, through normal operation, will collect small quantities of waste solvent and sludge. These small quantities of solvent and sludge should be stored in separate containers for proper disposal. These containers should be labeled and marked as “Hazardous PRF-680 Sludge.”

If the unit/activity is utilizing any other type of parts washer, other than the Clarus, contact the IEC for additional instruction and guidance.

9.30 Scrap Metal

Scrap metal is generated through vehicle maintenance and other unit activities. Scrap metal consists of metal parts/equipment that are no longer serviceable. Units must request a waste classification from DRMO. DRMO will perform a site visit to determine classification and turn-in requirements. Contact the IEC for assistance.

9.31 Used Tires

Tires generated from Fort Stewart or Hunter Army Air Field for disposal is only accepted for turn-in at Defense Logistics Agency (DLA) Disposition Services. This category includes tires generated from all tactical vehicles, special purpose wheeled vehicles such as construction equipment, and commercial type vehicles. Contact DLA disposition services (Bldg. 1152) at 767-4638/2779 for proper procedures for proper turn-in procedures.

9.32 Drain Table Operations

Used triple rinse solution is no longer used as a cleaning agent/solution to clean empty containers and is noted that in lieu of the triple rinse stations FS/HAAF will/have implemented the use of drain tables, which is an acceptable practice/standard

- All containers placed on the drain table must be drained for a 24-hour period. Containers drained to this standard are treated as if they were triple-rinsed.
- Residue from drained containers is collected in Above Ground Storage Tanks (ASTs)

9.33 Wash Racks and Oil Water Separators

9.33.1 Vehicle Cleaning

There are two kinds of vehicle cleaning operations: exterior washing and maintenance cleaning. Exterior washing, performed on Central Vehicle Wash Facilities (CVFW), is where soil from the outside of the vehicle is removed, usually at the end of a training exercise. Units must coordinate for the use of CVFW's before returning from field operations. Maintenance cleaning, performed on TEMF wash racks, is the cleaning of a vehicle's mechanical component and engine compartment. The wash water from exterior cleaning usually contains large amounts of dirt and debris, and traces of oil and grease. Wash water from maintenance cleaning usually contains lots of oil and grease, and small amounts of dirt.

Oil water separators (OWS) are designed to provide pretreatment of discharges before they reach the industrial waste treatment plant. They rely upon gravity to settle grit to the bottom of a chamber and float oil on the surface, while "clean" water flows out of the separator. Without this pretreatment, pollutants from wash racks and other areas would interfere with the operation of the industrial waste treatment plant or pass through to the environment.

To prevent problems found at wash racks and OWS', the following procedures **MUST** be followed:

- Use designated wash racks for all vehicle washing. Cleaning any vehicle or equipment outside of designated wash racks is strictly prohibited because it usually results in a discharge heavy in suspended solids (dirt, grit and debris), oil and grease flowing into surface water drainage systems.
- Use only water or steam (no cleaning solutions or soap) on wash racks.
- NEVER dispose of hazardous waste in wash racks or OWS' as these are considered disposal points.
- NEVER pour or drain oil into wash racks or OWS'.

- Ensure that wash racks are free of oily rags and trash.
- Ensure that wash racks are functional, that metal grating or baffles are present where needed and in good condition.
- It is the unit/activity's responsibility to ensure that wash racks (and OWS') are used properly, kept clean and remain serviceable. Unit/activities are not permitted to remove soil/grit accumulated in settlement basin. They must initiate a service request with the local contractor, i.e. Tsay Ferguson Williams (TFW) at (912) 767-2883, for this purpose.

9.33.2 MKT Cleaning

The FS/HAAF Environmental SOP for MKT Washing Operations stipulates the requirements for MKT washing operations, performed only on wash rack #915 at Ft. Stewart and on those wash racks at HAAF that drain to the wastewater treatment facility (10 ea). The SOP identifies the recommended cleaning agents that have been approved for use in MKT washing areas. The recommended cleaning agent product list is provided in Table 9-2.

9.33.3 Maintenance Bay Floor Cleaning

The only permissible methods for cleaning maintenance bay floors are (1), using dry absorbents such as dry-sweep or (2), using only a damp mop (not a wet or dripping mop) with a cleaning agent on the DPW "Recommended Cleaning Agent Product List" provided by the IEC. Hosing down bay floors to clean them is not permitted under any circumstances.

Table 9-2. Recommended Cleaning Agent Product List.

Product Name	Manufacturer	NSN	H=F=R*
Tuff Job	Cooke Ind (800) 682-5415	7930-01-331-1507	
“Ozzy Juice”	Chem Free Group (404) 564-5580		1=0=0
CBC4 (Country’s Best Cleaner)	Cooke Ind (800) 682-5415		
Speedex	BETCO (912) 236-7001		2=0=0
U.N.L.O.C.C	Hedgetree Chemical Manufacturing (912) 355-5837		
Shopmaster	Buckeye (912) 232-8143	6850-01-420-2882	0=0=0
Simple Green	Sunshine Makers, Inc. (310) 795-6000 (800) 228-0709	7930-346-9148	1=0=0
STC	Southeastern Solutions, Inc. (912) 727-3525		2=0=0
C-814	Southeastern Solutions, Inc. (912) 727-3525		2=0=0
1077	Southeastern Solutions, Inc. (912) 727-3525		1=0=0
Power Cleaner 310L	Penetone (201) 567-3000		1=0=0
Penair HD-3 (meets spec MIL-C-87937B)	West Penetone (813) 446-2165		1=0=0
Penair HD-2 (meets spec MIL-C-87937B)	West Penetone (813) 446-2165		1=0=0
999	State Chemical (216) 861-7114		2=1=0
MA-102	JAD Chemical Co (310) 833-7457	6850-01-378-0401	
Enviro-Clear	Environmental Cleanup Systems (800) 528-3046		
EcoSaf	Environmental Cleanup Systems (800) 528-3046		
EF50	Chem Trust Co (912) 537-6239		
EF51	Chem Trust Co (912) 537-6239		
Drummond Clean Buoy	Drummond American Corp (847) 913-9313		0=2=0
RITEC R-Float	Ri-Tech Industrial Products		2=2=0

	(770) 333-0054		
Sewer Rout	Florida Petrochemicals, Inc. (315) 472-4781		2=3=0
ETP Extra Tough	Georgia Mel-Tex Industries, Inc. (912) 367-7927		
PenPowe	West Penetone (813) 446-2165		
FR-15 Vapor Control	Qualchem (800) 383-4125		1=0=0
CIDEX OPA	Advanced Sterilization Products (800) 755-5900		1=0=0
Penetone E.T.	Penetone Corporation (800) 424-0565		
ZEP Formula 940	ZEP Manufacturing (877) 428-9937		2=0=0
ZEP Formula 50	ZEP Manufacturing (877) 428-9937		
PETROTECH 25	PETROTECH American Corporation (561) 966-0920		0=0=0
DE-Scale (#0135)	Share Corporation (414) 355-4000		1=0=0
Heavy Duty Industrial (#0419) Cleaner (HDIC) - Ultra	Share Corporation (414) 355-4000		2=0=0
Citra-Sol (#1378)	Share Corporation (414) 355-4000		1=2=0
Citralene NS (#1380)	Share Corporation (414) 355-4000		2=1=0
Fastbreak (#3726)	Hill Manufacturing Company (912) 537-9509		
Hurrisafe (#8015)	PCI of America (703) 392-0200		

***H=F=R – Health=Flammability=Reactivity**

NOTE 1: Some vendors provide the service of recycling their containers at no additional charge. When choosing a product from this list, it is recommended that these products be given priority. Environmentally, this reduces waste, water consumption, and manpower required for triple proper cleaning and container turn-in.

NOTE 2: Any questions regarding the development of this list may be directed to Mr. Stanley Thomas or Mr. Kevin Montano, Directorate of Public Works, Environmental Division, at (912) 767-2010.

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CHAPTER 10

REGULATED MEDICAL WASTE

Regulated medical waste (RMW) generated on FS/HAAF must be managed IAW the Georgia Solid Waste Management Rules, Chapter 391-3-4 and all Federal, DOD and U.S. Army Medical Command requirements. The proponent for RMW management for the Fort Stewart Medical Department Activity (MEDDAC) is the Chief, Environmental Health (Environmental Science Officer). The point of contact at the MEDDAC pertaining to the RMW disposal contract is the Chief, Environmental Services, (912) 435-6989.

For questions pertaining to expired/overstocked medications and medical supplies contact the MEDDAC Logistics Hazardous Material Technician at (912) 435-6319.

10.1 Definitions

Regulated medical waste is waste that is generated in the diagnosis, treatment, or immunization of human beings or animals which is capable of causing disease or which, if not handled properly, poses a risk to individuals or a community. This waste is also called "Infectious Waste", "Biohazardous Waste", "Clinical Waste", "Biomedical Waste", or simply "Medical Waste". Biomedical wastes are defined as any solid waste which contains pathological or biological waste, discarded medical equipment, cultures, and stocks of infectious agents and associated biological generated during treatment or research. Regulated medical waste consists of the following categories:

Pathological waste. Pathological waste includes include all recognizable human tissues and body parts except teeth which are removed during surgery, obstetrical procedures, autopsy, and laboratory procedures.

Biological waste, which means blood and blood products, exudates, secretions, suctionings, and other body fluids which contain free liquids and cannot be or are not directly discarded into a municipal sewer system.

Examples of **blood and blood products** include:

- Free flowing liquid human blood, plasma, serum, and other blood derivatives that are waste. For example, blood in blood bags, blood and/or bloody drainage in suction containers.
- Items caked with dried blood and capable of releasing blood during normal handling procedures.
- Items such as gauze or bandages, saturated or dripping with human blood, including items produced in dental procedures, such as gauze or cotton rolls saturated or dripping with saliva. Included are contaminated items that could release blood or related fluids if compressed.

Products used for personal hygiene (for example, diapers, facial tissues, and feminine hygiene products/sanitary napkins/tampons) that are saturated or dripping with blood are not subject to this definition.

Cultures and stocks. This category includes the cultures and stocks of infectious agents and associated biologicals including cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures.

Contaminated animal wastes. Examples include contaminated animal carcasses, body parts, their bedding, and other wastes from such animals which are infected with or which have been exposed to infectious agents, capable of causing disease in man. Carcasses of road kills, euthanized animals, animals dying of natural causes, animals used in military training exercises, and waste produced by general veterinary practices are not RMW.

Sharps (used and unused). Sharps, which means any discarded articles that may cause punctures or cuts. Examples include sharps used in animal or human patient care, treatment in medical, research, or support laboratories, or when used for live training purposes. This includes hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood collection tubes and vials, test tubes, needles attached to tubing, and culture dishes (regardless of presence of infectious agents). Other examples include broken or unbroken glassware that was in contact with infectious agents such as used slides and cover slips.

Chemotherapy trace wastes. Chemotherapy waste, which means any disposable material which has come into contact with cytotoxic/antineoplastic agents (agents toxic to cells) and/or antineoplastic agents (agents that inhibit or prevent the growth and spread of tumors or malignant cells) during the preparation, handling, and administration of such agents. Such waste includes, but is not limited to, masks, gloves, gowns, empty IV tubing bags and vials and other contaminated materials. These wastes must be first classified as “Non-RCRA Regulated” which means such quantity that it is not subject to other federal or state waste management regulations prior to being handled as biomedical waste.

Isolation wastes. Includes bedding, from patients or animals infected with Biosafety Level 4 (BSL) agents. Examples include biological waste and discarded materials contaminated with blood, excretion exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases caused by BSL 4 agents.

Other. Fluids that are designated by the local infection control authority and/or the U.S. Centers for Disease Control. They may include but are not limited to semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, and amniotic fluid. These designated fluids would be RMW when free flowing, dripping, or saturated on substrates.

10.2 Waste Management and Disposal

10.2.1 Waste Management. Personnel must identify and segregate RMW at the point of generation. Infectious waste must never be discarded as general SW and should never be mixed with HW for purposes of disposal. In cases where RMW is mixed with hazardous or radioactive waste, the resulting mixture will be subject to the requirements of the most stringent law.

RMW generated on FS/HAAF will be managed IAW GA-EPD, MEDCOM, and MEDDAC Regulations. The IEC will consult with MEDDAC personnel on RMW management procedures. Non-AMEDD units that generate RMW on FS/HAAF will comply with all applicable requirements. Non-AMEDD units will either turn in their RMW to the MEDDAC or utilize their own licensed RMW treatment and disposal contractors.

Note: Blood, body fluids, and contaminated materials generated during accidents, crimes, crime scene investigation, and other non-medical related events must be handled as biohazardous materials by the personnel tasked with handling and cleaning the areas. However, the wastes are not RMW subject to the MEDCOM/MEDDAC regulations and should not be turned in to the MEDDAC without prior consultation with MEDDAC personnel. Units/activities must contact the IEC and utilize a private contractor or other installation assets (not MEDDAC assets) for crime scene and accident clean-up.

10.2.2 Disposal.

Regulated medical waste must be stored, in appropriate shipping containers, in a storage area until it is removed by the disposal contractor. The storage area must be secured at all times and have limited access. It must be protected from rain and wind, temperature controlled, clean, and free of pests (e.g. insects, rodents, and other animals). The outside must be visibly labeled with the following words “Biomedical Waste Storage Area, Authorized Personnel Only.” A sample sign is provided in Figure 10-1.

10.3 RMW Transport

Facilities generating more than 100 pounds of RMW per month must use a GAEPD approved and licensed company for off-post transport and treatment. Regulated medical waste leaving the installation must be accompanied by HM shipping papers or a GA RMW manifest. The MEDDAC (Winn Army Community Hospital) utilizes a MEDCOM-wide RMW contract for transport, treatment, and disposal. RMW transported off FS/HAAF must be packaged IAW DOT regulations. The generator will sign and maintain shipping papers that meet DOT and GAEPD requirements. Only trained and authorized personnel will package and offer RMW for shipment (signing shipping papers is detailed in section 10.5 of this chapter).

10.4 Destruction Certification

10.4.1 Generators must receive and maintain destruction documentation for all RMW transported off FS/HAAF. This documentation must be maintained for 3 years.

10.4.2 Exception Reporting

Regulated medical waste generators must contact the transporter and/or disposal facility if a destruction certificate is not received within 35 days from the date the RMW was initially removed. An exception report must to be filed with the GAEPD if the shipping paper/manifest has not been received within 45 days from the date the RMW was accepted by the initial transporter. The exception report must include a legible copy of the unreturned shipping paper/manifest and a cover letter signed by the generator explaining the efforts taken to locate the RMW and the results of those efforts.

10.5 Training

Personnel generating and managing RMW must meet the training requirements specified under the Georgia Solid Waste Management Rules, Chapter 391-3-4, and MEDCOM Regulation 40-35. Personnel who package and ship RMW must receive training, certification, and formal authorization required in 49 CFR and DOD Regulation 4500.9-R, Chapter II. See Chapter 15 for more training information.

Figure 10-1. Biomedical Waste Storage Area Sign.

Biomedical Waste Storage Area	
Authorized Personnel Only	
No Smoking or Flames Within 50 Feet	
Emergency Contacts:	
Fire	911
Medical Assistance	911
Biomedical Waste Manager:	

Primary Name and Phone	

Alternate Name and Phone	

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CHAPTER 11

HAZARDOUS MATERIAL/HAZARDOUS WASTE TURN-IN PROCEDURES

This chapter defines the different types of waste identified for turn-in and the procedures the unit/activity must follow when turning in HM/HW at applicable Hazardous Waste Storage Areas (Bldg #1157 at FS and Bldg #720 at HAAF). HW generated at FS/HAAF will be transported to the applicable HWSAs for storage until such time that the IEC arranges for transport off-site to a treatment, storage, and disposal facility.

11.1 Waste Categories

Waste candidates for turn-in consist of the following three categories:

1. **HM no longer needed by the unit/activity.** These materials consist of new products that have not exceeded their expiration date for use. These materials should be turned into the DOL HAZMART (Bldg 1146 at FS). Units/activities may contact HAZMART personnel at (912) 767-1594 to arrange for pick-up. NOTE: If materials cannot be turned into the HAZMART, contact the IEC for additional guidance. In some cases, it may be possible to redistribute these materials.
2. **HM with expired shelf life.** These materials consist of new unopened products that have exceeded the expiration date for use. It is assumed that these containers are free of rust and are in good condition. The following conditions apply:
 - a. Your supply support activity can refer to the FEDLOG, column SLC to determine if the material is extendable or non-extendable. If the expiration date has been extended, mark all effected containers appropriately.
 - b. If the expiration date is not extended, contact the IEC for additional guidance and turn-in procedures.
3. **All substances classified as HW.** All substances classified as HW shall be turned into the applicable HWSA following the procedures listed in this chapter. Hazardous Waste Storage Areas are designed to receive, process and dispose of all HW generated on FS/HAAF.

11.2 Unit/Activity Responsibilities

Unit/Activity ECO/ECNCOs, or designated UPP/SAP HW Manager/s, are responsible for the turn-in and disposal of wastes to the HWSAs (i.e., Bldg #1157 at FS and Bldg #720 at HAAF). When hazardous and non-hazardous waste containers are three-quarters full, the UPP/SAP HW Manager/s must contact the IEC to coordinate turn-in.

11.3 Waste Turn-in Procedures

11.3.1 Scheduling Waste Turn-in

Once units/activities have identified all items for turn-in, they must schedule an appointment with the applicable HWSA:

- FS Hazardous Waste Facility, call (912) 767-4634.
- HAAF 90-day Hazardous Waste Storage Area, call (912) 315-6287.

The following information must be provided to the HWSA when scheduling an appointment:

- Unit
- Point of contact
- Telephone number
- Type of waste to be turned in
- Quantity of waste to be turned in

11.3.2 Waste Turn-in Requirements

The following waste turn-in requirements apply:

- All waste deliveries **MUST** be made in a military or GSA vehicle. No personally owned vehicles (POVs) are allowed.
- Prepare a Unit Used Material Manifest and ensure that it has been signed by the Unit ECO, BMS, or BMO. **NOTE:** All items submitted for turn-in must be identified and listed on the Unit Used Material Manifest form. A copy of the Unit Used Material Manifest form is provided in Figure 11-1.
- Load and separate items on transport vehicle so that the material can be unloaded quickly and safely.
- Make sure that all items are transported in approved containers and properly tied down. Reference Chapter 7, Hazardous Waste Management for instructions regarding container selection and container condition.

11.3.3 Waste Accepted for Turn-In

Table 11-1 lists the waste that can be accepted for turn-in at applicable HWSAs. If the unit/activity has a waste stream not identified in Table 11-1, contact the IEC for additional instruction and guidance.

Table 11-1 Waste Accepted for Turn-in

Waste Stream	Special Instructions
Absorbents and rags contaminated with oil, grease, JP8, etc.	Must be triple bagged or drummed.
Aerosol Cans	55-gallon drum full (remove caps and spray buttons).
Antifreeze	Must be in closed head drum.
Batteries (includes lithium, mercury, Ni-Cad, alkaline and lead-acid)	All batteries must be discharged if possible, vent holes taped over, and anodes taped over before they will be accepted for turn-in.
Contaminated Soil/Dry Sweep	Bagged or drummed; remove all trash.
Lamps	All lamps or light bulbs will be turned in except incandescent.
MOGAS	Must be in clean, serviceable closed head drum.
NBC Wastes (includes M-48 gas particulate filters, C-2 and C-2A1 filters (sorted), M-256, M291, M256, etc.	Separate container for each filter/kit number.
Off-spec JP8	Must be in closed head drum.
Paint (Oil-Based, Enamel and CARC)	All CARC paint as well as residue is accepted for turn in. All liquid oil based and latex paint is accepted for turn-in.
Synthetic Oil (includes FRH, DEXRON III and brake fluid)	Must be in clean, serviceable closed-head drum.
Used Fuel Filters	Filters must be drained and placed in 55-gallon drum.
Used Oil Filters	Filters must be drained and placed in 55-gallon drum.

NOTE: Empty cans and oil bottles will be picked-up by the HAZMART personnel (if they are empty and clean) when package POL products are delivered. If you do not use the HAZMART for POL products, ensure that your empty cans and bottles are placed in the nearest recycle container or transported to the recycle center on a routine basis.

Items not accepted for turn-in include the following:

- **Asbestos and Asbestos Containing Material (ACM).** Even though the permitted FS HWSA (Bldg #1157) will not accept asbestos and ACM, personnel at this facility will weigh, bag and assist with preparation of a Waste Shipment Record (i.e., Asbestos Manifest) that is needed for turn-in at the FS landfill. A copy of the Waste Shipment Record is provided in Figure 11-4.
- **Radioactive Wastes.** Radioactive wastes are managed by the Installation Safety Office. For guidance and assistance call (912) 767-7880.
- **Biological Items.** Reference Chapter 10, Regulated Medical Waste for guidance and assistance.

11.4 Unit Used Material Manifest Form

Each hazardous item scheduled for turn-in by the unit/activity to the HWSA must be accompanied with a Unit Used Material Manifest. Figure 11-1 provides an example of the Unit Used Material Manifest form. If you need assistance completing this form, contact your designated IEC Environmental Compliance Inspector or the appropriate HWSA at (912) 767-4634 (FS) or (912) 315-6287 (HAAF). This form must be filled out prior to transporting the waste to the HWSA.

11.5 DD Form 1348-1A

Figure 11-2 provides an example of the DD Form 1348-1A. Detailed instructions for completing the DD Form 1348-1A are found in Figure 11-3. If further assistance is needed, contact the HWSA at (912) 767-4634.

11.6 Waste Shipment Record for Asbestos

The permitted Hazardous Waste Facility at FS (Bldg #1157) does not accept asbestos or asbestos containing wastes for disposal; however, personnel at this facility will weigh, bag and assist with preparation of the Waste Shipment Record (i.e., Asbestos Manifest) for the generating unit/activity.

Asbestos and Asbestos Containing Material (ACM) must be taken to the FS landfill for disposal after completing a Waste Shipment Record (i.e., Asbestos Manifest). A copy of the Waste Shipment Record is provided in Figure 11-4. The completed Waste Shipment Record must accompany the load to the landfill. Additional guidance and instruction can be obtained by contacting the HWSA at (912) 767-4634.

11.7 IEC Responsibilities

Hazardous waste generated at any unit/activity is eventually transported off the installations for treatment, storage, and disposal by a waste contractor through the DRMO. The IEC is the liaison with the DRMO and will arrange for HW pick-ups from the FS and HAAF HWSAs. Before a contractor transports HW items off-site, manifests and turn-in documents must be prepared and/or verified by the IEC and DRMO personnel. Shipping containers must be properly marked and approved in accordance with 49 CFR Parts 173, 178, and 179. The IEC or designated DRMO personnel must verify the hazardous waste manifest, and that the initial waste transporter has properly placarded the transport vehicle.

Figure 11-1. Unit Used Material Manifest Form

FORT STEWART Bldg 1159 PHONE: (912)767-4634			
UNIT USED MATERIAL MANIFEST			
Per 49 CFR, Federal law requires that personnel be aware of what hazardous materials and hazardous wastes are being transported in the vehicles they are operating. All waste must be secured in approved closed containers, which are properly labeled.			
SCHEDULED TURN-IN TIME _____		DATE _____	
		MANIFEST NUMBER _____	
	Used Material Type	Mandatory Requirements	Quantity/Pounds
<input type="checkbox"/>	Contaminated Dirt/Dry sweep		
<input type="checkbox"/>	Contaminated Shop Rags		
<input type="checkbox"/>	Batteries (Lithium, Lead Acid, NiCad) (No Alkaline)	LITHIUM must be discharged and connectors taped.	
<input type="checkbox"/>	Liquids (ex: SYN OIL, Simple Green)	Not less than ¾ full drum with bungs in place.	
<input type="checkbox"/>	Filters (ex: Oil, Fuel, NBC)	Full drum, all filters must be crushed or drained (DO NOT MIX) .	
<input type="checkbox"/>	Filters (NBC)	All filters must be separated.	
<input type="checkbox"/>	Lamps (No incandescent)		
<input type="checkbox"/>	Tires	DD Form 1348-1a for each NSN and Unit DODAAC.	
<input type="checkbox"/>	Antifreeze		
<input type="checkbox"/>	JP8		
<input type="checkbox"/>	Grease		
<input type="checkbox"/>	Aerosol Cans	Remove all caps and spray nozzles.	
<input type="checkbox"/>	Other (Specify)		
<input type="checkbox"/>	Other (Specify)		
<input type="checkbox"/>	Other (Specify)		
<input type="checkbox"/>	Other (Specify)		
Unit ECO, BMS, or BMO: I hereby declare that the contents have been properly packaged, labeled and load secured for transportation to the Hazardous Waste Turn-In Facility and that the Driver/TC of the vehicle is aware of what he/she is transporting.			
Printed Name		Signature	Date
Driver or TC Acknowledgment of Above			
Printed Name		Signature	Date
Hazardous Waste Turn-In Facility Representative			
Printed Name		Signature	Date

Figure 11-3. DD Form 1348-1A Instructions (Page 1 of 4)

**ATT 1
CHAP 3
DoD 4160.21-M**

**TURN-INS TO DEFENSE REUTILIZATION AND MARKETING OFFICES
ON DD FORM 1348-1A**

**(SINGLE LINE ITEM TURN-INS)
Excerpted from DoD 4000.25-1-M, MILSTRIP
Reference: Paragraphs A3 and C1**

<u>FIELD LEGEND</u>	<u>RECORD POSITION</u>	<u>ENTRY AND INSTRUCTIONS</u>
Document Identifier	1-3	Perpetuate from the source document. For locally determined excesses generated at a base, post, camp, or station, assign a DI code as determined by S/A procedures.
Routing Identifier	4-6	Enter the RI of the shipping activity or leave blank when the shipping activity is not assigned an RI.
Media and Status	7	Leave blank.
Stock or Part Number	8-22	Enter the stock or part number being turned-in. For subsistence items, enter the type of pack in rp 21. If an NSN is not used, FSC and NCB code must be used with part number and/or noun/nomenclature. See Block 25.
Unit of Issue	23-24	Enter the unit of issue of the stock or part number being turned-in.
Quantity	25-29	Enter the quantity being turned-in to DRMO. See Block 26.
Document Number	30-43	Perpetuate from source document. This cannot be the same document number that was used to receive the materiel. For locally determined excess generated at base, post, camp, or station, assign as determined by S/A procedures. See Block 24.

3.1-1

Figure 11-3. DD Form 1348-1A Instructions (Page 2 of 4)

DoD 4160.21-M

Suffix	44	Leave blank. See Block 24.
Supplementary Address	45-50	Enter DoDAAC of predesignated consignee DRMO.
Signal	51	For hazardous material and waste turn-ins, enter Signal Code L; otherwise, leave blank.
Fund	52-53	For hazardous material and waste turn-ins, enter the MILSBILLS fund code designating the funds to be charged. For those activities not users of MILSBILLS, (i.e., Corps of Engineers, USCG), enter "XP."
Distribution	54	Perpetuate from source document or leave blank.
Retention Quantity	55-61	Enter the quantity to be retained in inventory or leave blank.
Precious Metals	62	Enter applicable code from appendix B28.
Automated Data Processing Equipment Identification	63	Enter applicable code from appendix B29.
Disposal Authority	64	Enter applicable code from appendix B26.
Demilitarization	65	Enter code assigned as required by DoD 4160.21-M-1. NOTE: When demilitarization has been accomplished prior to transfer to DRMO, the appropriate demilitarization certification, as required by DoD 4160.21-M-1 must be reflected in Block 27.
Reclamation	66	Enter code "Y" if reclamation was performed prior to release to a DRMO. Enter "R" if reclamation is to be performed after turn-in to DRMO. Enter code "N" if reclamation is not required.
Routing Identifier	67-69	Perpetuate from Disposal Release Order.

Figure 11-3. DD Form 1348-1A Instructions (Page 3 of 4)

DoD 4160.21-M

Ownership	70	Enter applicable code or leave blank.
Supply Condition	71	Enter applicable code from appendix B18.
Management	72	Perpetuate from source document or leave blank.
Screening	73	Leave blank.
Unit Price	74-80	Enter the unit price for the NSN or part number in rp 8-22.

BLOCK ENTRIES

- 1 Enter the extended value of the transaction.
- 2 Enter the shipping point identified by DoDAAC; if reduced printing is used, in-the-clear address may be entered in addition to the DoDAAC.
- 3 Enter the consignee DRMO by DoDAAC. This will be the predesignated DRMO and will be entered by the shipping activity; if reduced printing is used, the in-the-clear address may be entered in addition to the DoDAAC.
- 4 Insert HM, if the turn-in is hazardous materiel or HW, if the turn-in is hazardous waste.
- 5 Enter the date of document preparation, if required by the shipper.
- 6 Enter the national motor freight classification (NNFC), if required by the shipper.
- 7 Enter the freight rate, if required by the shipper.
- 8 Enter coded cargo data, if required by the shipper.
- 9 Enter applicable controlled inventory item code which describes the security/pilferage classification of the shipment from DoD 4100.39-M, volume 10, Chapter 4, table 61.
- 10 Enter the quantity actually received by the DRMO, if different from positions 25-29.
- 11 Enter the number of units of issue in a package, if required by the shipper.
- 12 Enter the unit weight applicable to the unit of issue, if required by the shipper.

Figure 11-3. DD Form 1348-1A Instructions (Page 4 of 4)

DoD 4160.21-M

- 13 Enter the unit cube applicable to the unit of issue, if required by the shipper.
- 14 Enter the uniform freight classification, if required by the shipper.
- 15 Enter the shelf life, if appropriate; otherwise, leave blank.
- 16 Enter in-the-clear freight classification nomenclature, if required by the shipper.
- 17 Enter the item nomenclature. For non-NSN items; enter as much descriptive information as possible. Specified additive data or certification from the generating source for specific types of property should be entered.
- 18 Enter type of container, if required by the shipper.
- 19 Enter number of containers that makes up the shipment, if required by the shipper.
- 20 Enter total weight of shipment, if required by the shipper.
- 21 Enter total cube of shipment, if required by the shipper.
- 22 Received By - Enter the signature of person receiving the materiel.
- 23 Date Received - Enter date materiel was received and signed for.
- 24 Document Number - Perpetuate from source document. This cannot be the same document number that was used to receive the materiel. For locally determined excesses generated at base, post, camp, or station, assign a document number as determined by Service/Agency procedures. Suffix Code - Leave blank.
- 25 National Stock Number - Enter the stock or part number being turned-in. For subsistence items, enter the type of pack in rp 21. If an NSN is not used, FSC and NCB code must be used with part number and/or noun/nomenclature.
- 26 For turn-in to DRMO - This block will not contain bar code data, it is reserved for internal DRMO/DRMS.
- 27 This block may contain additional data including bar coding for internal use. Enter data in this block as required by the shipping activity or the DRMO receiving the materiel. When data is entered in this block, it will be clearly identified. For hazardous material and waste turn-ins, enter the DoDAAC of the bill-to office, the contract line item number (CLIN) for the item, and the total cost of the disposal, (that is, CLIN cost times quantity in pounds equals cost of disposal).

3.1-4

Figure 11-4. Waste Shipment Record (i.e., Asbestos Manifest)

WASTE SHIPMENT RECORD

1. Work site name and mailing address:		Owner's Name:	Owner's Telephone #:
HQs 3d IN Div (M) & Ft Stewart ATTN: AFZP-DEV, Ft Stewart, GA 31314-5000		U.S. Govt	(912) 767-4634
2. Operator's name and address:			Owner's Telephone #:
DPW Fort Stewart Environmental Office (Same as #1)			(912) 767-4634
3. Waste disposal site (WDS) name, mailing address and physical site location:			WDS Telephone #:
DPW Fort Stewart Landfill			(912) 767-3497
4. Name and address of responsible agency:			
DPW Environmental Office Ft Stewart, GA 31314-5000			
5. Description of materials:	6. Containers		7. Total Qty
	No.	Type	m ³ (yd ³)
8. Special handling instructions and additional information:			
9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.			
Printed/Type Name & Title		Signature	Date
Craig Christopher, Environmental Specialist			
10. Transporter 1 (Acknowledge of receipt of materials)			
Printed/Type Name & Title		Signature	Date
Address & Telephone #			
11. Transporter 2 (Acknowledge of receipt of materials)			
Printed/Type Name & Title		Signature	Date
Address & Telephone #			
12. Discrepancy indication space.			
13. Waste disposal site owner or operator: Certification of receipt of asbestos materials covered by this manifest as noted in item 12.			
Printed/Type Name & Title		Signature	Date

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CHAPTER 12

HAZARDOUS WASTE MANIFEST

12.1 Manifest Purpose

FS/HAAF generators who offer for transport HW for off-site treatment, storage, or disposal must prepare a HW manifest. A HW manifest is not required if a HW is only transported within or along the border of the installation. The HW manifest serves several purposes:

- The completed manifest is used as a tracking device to trace HW shipments. It identifies the facility that generated the waste, the transporter, and the permitted disposal facility, which ultimately treats and disposes of the waste. Consequently, the manifest identifies who is responsible for the waste from the point of generation to the point of disposal.
- The manifest provides important information during transportation emergencies. In case of an accident, information on the manifest may be used to identify HW carried on the vehicle and the necessary emergency procedures to control a fire, spill, or explosion.
- The manifest is also used as a basis for record keeping and reporting. Additionally, a copy of the manifest must be submitted to the EPA and the GAEPD in case a shipment of HW is not received by the designated disposal facility.

12.2 Required Information

FS/HAAF (the IEC) must prepare a HW manifest before transporting (or offering for transport) HW to an off-site treatment/disposal facility. The EPA established new manifest rulemakings in 2005, 4 March 2005; 70 FR 10776 and 16 June 2005; 70 FR 35034. Under these rules, the same manifest must be used for HW transportation in all states beginning 5 September 2006. Detailed instructions for completing the Hazardous Waste Manifest are provided in Appendix B. A copy of the EPA Uniform Hazardous Waste Manifest is provided in Appendix B, Figure B-1.

12.3 Required Copies

FS/HAAF must prepare eight copies of the manifest:

- After FS/HAAF and the transporter sign the prepared manifest, FS/HAAF shall send copy #7 of the manifest to the GAEPD and copy #6 to the state/country where the waste will be stored, treated, or disposed. This must be done within one week of the date that the transporter accepted the waste. The generator will retain copy # 8 as a record. NOTE: Georgia does not require copies of manifests to be submitted to the state regardless of whether the waste originates or is disposed of in the state.
- The transporter must keep copy #5 and deliver copies #1, 2, 3, and 4 to the designated HW disposal facility. The owner/operator of the facility will keep copy # 4 and must

return the signed copy #3 to the generator and copy #1 to the state/country where the waste is disposed. In addition, the owner or operator of the treatment or disposal facility will provide the GAEPD, at the end of each month, copy #2 of the completed and signed manifest. When the generator receives the returned-signed copy of the manifest, it must be maintained on file for at least 3 years.

12.4 Exception Reports

The IEC must submit an Exception Report to the GAEPD if a manifest has not been received from the HW transporter, stating the date and place of departure from Georgia, within 30 days from the date the waste was accepted by the initial transporter. The exception report must include a legible copy of the unreturned manifest and a cover letter signed by the generator explaining the efforts taken to locate the HW, and the results of those efforts.

12.5 Training and Certification Requirements

All personnel responsible for the preparation and/or shipment of HM/HW in commerce, must receive training IAW with Title 49 CFR 172.704. Personnel signing HW manifests must be trained and certified in writing by the command IAW DOD Regulation 4500.9-R. The IEC must approve all HW shippers prior to certification by the Command. See Chapter 15, Training Requirements, for more information on necessary training and a list of DOD approved training courses.

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CHAPTER 13 HAZARDOUS WASTE AND MATERIAL TRANSPORTATION REQUIREMENTS

Hazardous wastes and used POL products generated by FS/HAAF units/activities are transported off-site for treatment, storage, and disposal by a licensed waste contractor through the DRMO. The IEC is the liaison with the DRMO and will arrange for HW pick-ups.

13.1 Transportation of Hazardous Waste

The following general requirements pertain to the transportation of hazardous waste:

- HW shall not be transported on any public highway or road, except by a state licensed hazardous waste hauler using a Uniform HW Manifest. HW manifests shall only be signed by an individual granted signing authority. If your activity has a waste that must be manifested off site, contact the IEC for guidance.
- HW generated off-site during an exercise must be turned-in at the host installation. Transportation and turn-in arrangements with the host installation should be made well in advance.
- Units may only transport HW within the installation boundaries. Drivers and vehicle commanders must be made aware of the HW being transported and they must secure HW cargoes so they do not shift during transport, and must use containers appropriate to the waste being transported.

13.2 On-Post Transportation

Units/activities must complete a Unit Used Material Manifest for each vehicle load of HW being transported and the form must accompany the waste during transport. Personnel may transport small amounts (in containers of 55 gallons or less) of HW or HM on-post provided the vehicle is equipped with an appropriate spill kit and the driver has received emergency response training (see Chapter 15, Training Requirements).

Unit/activity personnel may transport large quantities (more than the equivalent of 55 gal. in any single container) of HW or HM on FS/HAAF provided:

- The transport vehicle is equipped with an appropriate spill kit;
- Drivers and vehicle commanders are made aware of HW being transported and HW cargoes are secured so they do not shift during transport;
- Only containers appropriate to the waste being transported are used; and

- The driver possesses a DD Form 1902, Certification of Qualification (Ammunition and Fuel Handlers) – see para. 15.2.5.

Commercial or government-owned vehicles must be used for HW and HM transportation. The use of *privately owned vehicles is prohibited!*

13.3 Off-Post Transportation

The waste removal contractor will prepare waste for off-post transportation IAW transportation regulations by performing required packaging, labeling, marking, and record-keeping requirements. ***Activities/units should never transport HW off-post!*** Units/activities may transport HM off-post only under very restricted circumstances (usually limited to the transport of small arms ammunition or bulk fuel between Ft. Stewart and Hunter Army Airfield) provided:

- Transport is in a commercial or government-owned vehicle;
- The vehicle is equipped with an appropriate spill kit; and
- The driver possesses a DD Form 1902, Certification of Qualification (Ammunition and Fuel Handlers) – see para. 15.2.5.
- The driver received HM shippers training as specified in Chapter 15, Training Requirements.

13.4 Training and Certification Requirements

The DOT regulates the shipment of HM and HW under 49 CFR. In addition, the DOD establishes training standards in DOD 4500.9-R, Part II, Cargo Movement, Chapter 204. See Chapter 15, Training Requirements, for specific transportation training and certification requirements.

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CHAPTER 14 INSPECTION REQUIREMENTS

This chapter identifies the daily, weekly, monthly and quarterly inspection requirements applicable to all units/activities and tenants located at FS/HAAF. These inspection requirements are required by the Federal and State regulatory permits maintained by the installation and by Army, DOD, and FS/HAAF guidance and policy. This chapter also addresses IEC responses to inspections/audits of the installation conducted by agencies external to the installation (e.g., IMCOM, DA, Georgia EPD, EPA, etc.).

14.1 Unit/Activity Inspections

Unit/activity ECO/ECNCOs or UPP/SAP HW Managers are responsible for conducting or overseeing inspections of their work areas and UPP/SAP locations. The following inspections are required:

14.1.1 Comprehensive Unit Inspection. The ECO/ECNCO shall conduct a weekly inspection of the entire unit/activity using the Environmental Compliance Inspection Checklist (Appendix E, Exhibit E-1).

14.1.2 Stormwater Inspection. The ECO/ECNCO shall conduct a daily inspection using the FS/HAAF Daily/Monthly Stormwater Inspection Checklist (Appendix E, Exhibit E-2)

14.1.3 Deficiencies. For each deficiency identified at the time of inspection, the unit/activity is required to implement corrective actions on the spot. All deficiencies identified, and corrective actions implemented, must be appropriately annotated in applicable sections of the inspection form, i.e. comment sections. Additional pages may be attached if more space is required.

If a potentially dangerous situation exists, personnel must immediately notify the FS/HAAF Fire Department, IEC, and chain of command. If no HW is present at the time of the inspection, the inspector must annotate in the comment section and indicate the inspection date.

Copies of completed inspection forms must be maintained on file by the unit/activity for a minimum of 3 years and be readily available for review upon request.

14.2 IEC Environmental Program Management Inspections

14.2.1 Inspection Process. Each unit/activity will undergo a formal unannounced environmental compliance inspection each quarter. The IEC will conduct the quarterly environmental compliance inspections using the form provided in Appendix E, Exhibit E-1. The activity ECO/ECNCO or UPP/SAP HW Manager, or alternate personnel, must accompany the IEC at the time of the inspection. A passing score is “70” percent.

A copy of the inspection results will be provided to the ECO, or alternate personnel, upon completion of the inspection. Inspection forms must be maintained on file for a minimum of three (3) years. If the unit/activity receives a failing score, it will be provided a maximum of two weeks to correct the identified deficiencies, i.e., non-compliance items.

14.2.2 Deficiencies. The IEC will re-inspect units/activities that received a failing score within 14 days. If the unit/activity fails the re-inspection, a formal notification will be sent to the activity's chain of command describing the issues and requesting a plan of action to correct the problem. A memo to the Garrison Commander will also be submitted at this time if the identified deficiencies are not addressed. Repeated failures to correct identified deficiencies will be briefed in the EQCC.

14.2.3 Annual Assessment. The IEC will conduct an annual review of the quarterly inspection results and report the compliance status of units to the Command.

14.3 90-Day Hazardous Waste Storage Area at HAAF

The IEC conducts regular inspections at the 90-day Hazardous Waste Storage Area (Bldg #720) at HAAF. The facility is inspected for equipment malfunctions, structural deterioration, operator errors, and discharges that could cause or lead to the release of hazardous waste and adversely affect the environment or threaten human health. The following inspections are conducted weekly by an IEC employee (or designated representative) trained in hazardous waste storage procedures:

- 90-Day Storage Area Inspection Checklist (Appendix E, Exhibit E-3)
- Facility Inspection Log (Appendix E, Exhibit E-4)
- Secondary Containment Checklist (Appendix E, Exhibit E-5)
- Tank Inspection Checklist (Appendix E, Exhibit E-6)

Copies of completed inspection records must be maintained on file at the facility for a minimum of three (3) years and be readily available for review upon request.

14.4 Permitted Hazardous Waste Facility at FS

The IEC conducts regular inspections at the permitted Hazardous Waste Facility at FS (Bldg #1157). The facility is inspected for equipment malfunctions, structural deterioration, operator errors, and discharges that could cause or lead to the release of hazardous waste and adversely affect the environment or threaten human health. The following inspections are conducted weekly by an IEC employee (or designated representative) trained in hazardous waste storage procedures:

- Facility Inspection Log (Appendix E, Exhibit E-4)

- Secondary Containment Checklist (Appendix E, Exhibit E-5)
- Tank Inspection Checklist (Appendix E, Exhibit E-6)

Inspections of container storage area are conducted weekly in accordance with permit application requirements. The Facility Inspection Log (reference Appendix E, Exhibit E-5) provides information about the status of container deterioration due to corrosion, leaks, or other factors. Regardless of the container condition (acceptable/unacceptable), observations must be made as to the number of containers, aisle space, height of stacking, quantities, etc.

14.5 Deficiencies at FS/HAAF HWSAs

If a deficiency is noted during an inspection, the following actions must be taken:

1. Note the deficiency on the appropriate inspection form and annotate with the problem, the time the deficiency was noted, and any immediate actions required to correct the deficiency.
2. If required, implement remedial actions to correct the deficiency.
3. After correction of the deficiency, the actions taken and the date the deficiency was corrected must be annotated and signed off on the appropriate inspection form.

Copies of completed inspection records must be maintained on file at the facility for a minimum of three (3) years and be readily available for review upon request.

14.6 IEC responses to environmental inspections/audits conducted by external agencies

IEC will provide responses when required to environmental inspections/audits of the installation conducted by external agencies. In those cases where a specific tenant unit or activity is identified in a finding or violation, IEC will request an explanation from the unit commander or activity supervisor for inclusion in the IEC response.

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CHAPTER 15

TRAINING REQUIREMENTS

This chapter describes the training personnel must receive under Federal, Georgia, and DOD regulations. FS/HAAF commanders and supervisors are responsible for providing emphasis and guidance to all personnel whose duties may impact the environment. To help prevent personal injury, or harm to public health and the environment, concerted efforts must be made by all FS/HAAF personnel to ensure environmental training requirements are met and environmental stewardship is incorporated into all mission/duty activities.

15.1 FS/HAAF Training Policy

All personnel in assigned units/activities on FS/HAAF who, because of their job assignment, are required to handle HM and HW, and those individuals who are designated to supervise activities involving the generation, collection, transportation and turn-in of HW shall be given orientation and/or appropriate training in the proper control of HM and HW.

15.2 Hazardous Waste Management Training Requirements

The IEC is responsible for conducting or facilitating training and ensuring that HW management training is performed in accordance with this section. Training must be documented in accordance Section 15.4 of this chapter.

15.2.1 IEC Personnel

Personnel assigned to the FS/HAAF Directorate of Public Works (DPW) Environmental Division, who work with HM and HW and who manage and oversee personnel working with HM and HW, must receive the following training:

- 40-Hour Hazardous Waste and Emergency Response (HAZWOPER)
- 8-Hour HAZWOPER Refresher on annual basis
- Initial Federal HAZCOM (not at stand alone course—train-the-trainer)

Additional training is required for selected personnel that work in the field and/or participate in spill response activities:

- 40-Hour HAZMAT Technicians Course

15.2.2 Environmental Compliance Officers/NCO's (ECO/ECNCO)/Civilian Equivalents

Individuals assigned to an organization or unit whose responsibilities include managing unit environmental compliance requirements on behalf of the Commander, director, or supervisor. The Unit ECO's primary responsibilities include the following:

- Conducting daily and weekly unit level inspections of environmental compliance.
- Overseeing UPPs/SAPs.
- Internal monitoring of programs to ensure compliance.
- Serving as unit/activity point of contact during compliance inspections.
- Advising Commander or supervisor on environmental issues.

The ECO/ECNCO and Civilian Equivalents must complete the following course as soon as possible after their appointment to ECO/ECNCO duties:

- 5-day Environmental Compliance Officer course

15.2.3 Used Product Point (UPP)/Satellite Accumulation Point (SAP) HW Managers

The UPP/SAP HW Manager is an individual assigned to an organization or unit whose primary responsibilities include:

- Supervising UPPs and SAPs
- Using hazardous materials
- Generating hazardous waste
- Internal monitoring of programs to ensure compliance (weekly inspections)

UPP/SAP HW Managers must complete the following courses as soon as possible after their appointment:

- 3-hour Hazardous Material/Hazardous Waste Handlers course
- Federal HAZCOM (not a stand-alone course—train-the-trainer)

15.2.4 Hazardous Material Users/Hazardous Waste Generators

All personnel in assigned units/activities on FS/HAAF who, because of their job assignment, are required to handle HM and HW, and those individuals who are designated to supervise activities involving the generation, collection, transportation, and turn-in of hazardous waste, must complete the following training:

- 3-hour Hazardous Material/Hazardous Waste Handlers course (annual requirement)
- Federal HAZCOM (not a stand-alone course—train-the-trainer)

15.2.5 Hazardous Waste Shippers/Transporters (includes individuals signing manifests)

All personnel involved with the preparation and shipment of HAZMAT for transportation must receive training IAW 49 CFR 172.704 and DOD Regulation 4500.9-R, Part II, Chapter 204. The following requirements apply to Hazardous Waste Shippers/Transporters:

- Anyone responsible for on-post HM/HW transportation must receive emergency response training.
- Activity/unit personnel who transport large quantities of HM/HW (over 55 gallons) must possess a DD Form 1902, Certification of Qualification (Ammunition and Fuel Handlers) after receiving appropriate training from G4 COMET Team.
- All personnel responsible for the preparation and/or shipment of HM/HW in commerce (off-post) must receive training IAW with 49 CFR 172.704 and DOD Regulation 4500.9-R. Training must include general awareness, function specific, safety and security training.
- Anyone signing HM shipping papers or HW manifests must attend and receive certification from a DOD approved school as outlined in DOD Regulation 4500.9-R, Chapter 204.
- All personnel signing certification statements on HM shipping papers must be appointed in writing by the activity/unit Commander. Appointment must include scope of authority.
- All personnel signing HW/non-regulated waste manifests must be appointed in writing by the IEC or his designated representative.
- All HAZMAT personnel must receive refresher training at 24-month intervals IAW with DOD Regulation 4500.9-R.

15.3 Course Listing and Enrollment Information

15.3.1 5-Day ECO Course Offered by IEC in DPW Training Location.

The 5-day ECO Course is offered 4-6 times per year. Personnel wishing to refresh two or more years after attending may attend again. The point of contact for the 5-Day ECO Course is:

FS/HAAF		
Name	Telephone	Email Address
Andy Rodriguez	(912) 767-8012	benito.a.rodriguez.ctr@mail.mil

15.3.2 3-Hour HM/HW Handlers Course

The 3-hour HM/HW Handlers Course is offered upon unit/activity request by IEC. The unit/activity must provide the training venue. The unit/activity must request the training from their assigned environmental compliance inspector and place the training on the unit/activity training calendar. A minimum of 15% of the unit/activity's authorized total, personnel strength must attend this training annually. The points of contact for the 3-hour HM/HW Handlers Course are:

Fort Stewart (FS)		
Name	Telephone	Email Address
Clifton Jefferson	(912) 767-5218	clifton.j.jefferson.ctr@mail.mil
Derrick Smith	(912) 767- 5812	derrick.i.smith,ctr@mail.mil
Dale Morningstar	(912) 767- 6126	dale.e.morningstar.ctr@mail.mil
Hunter Army Airfield (HAAF)		
Name	Telephone	Email Address
Rodney Wilmore	(912) 315-4736	rodney.wilmore1.ctr@mail.mil

NOTE*Assigned environmental compliance assessor will review their unit/activity's current status on the required annual HM/HW Handlers Course training at the end of every 4th quarter of the fiscal year.**

15.3.3 Federal HAZCOM.

Federal HAZCOM training is provided by the FS/HAAF Safety Office. The point of contact for this training is:

FS/HAAF		
Name	Telephone	Email Address
Anthony Woodard	(912) 767-6541	anthony.woodard1civ@mail.mil

15.3.4 Specialty Courses Required by IEC/Medical Personnel

Specialty courses required by applicable regulations will be obtained from DOD approved course providers, either on site or at off-site locations.

15.4 Training Records

FS/HAAF units/activities must maintain documentation to illustrate that appropriate personnel have successfully completed required training. The following records will be maintained:

- ECO training certificates for personnel who have completed the course and are functioning as ECO/ECNCO or civilian equivalents must be maintained as part of unit/activity ECO records.

- Copies of sign-in rosters circulated by environmental compliance inspectors during their conduct of the annual HM/HW Handlers' Course, annotated with quiz scores for each name on the roster and furnished by inspectors subsequent to the instruction must be maintained as part of unit/activity ECO records.

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CHAPTER 16

RECORDKEEPING AND REPORTING

Important documents and record keeping information is maintained to record all aspects of HW management. This chapter is intended to provide a brief summary of regulatory reporting and record keeping requirements presented in the previous chapters of this plan. All records must be organized and maintained by the generating unit/activities and the FS/HAAF IEC. Documents may be requested for review by Federal or GA regulators, DOD agencies, or FS/HAAF personnel at any time and must therefore be readily available.

16.1 Inspection Forms

The following inspection forms will be maintained for three (3) years:

- Weekly Environmental Compliance Inspection Checklist (Appendix E, Exhibit E-1)
- FS/HAAF Daily/Monthly Stormwater Inspection Checklist (Appendix E, Exhibit E-2)
- 90-Day Storage Area Inspection Checklist (Appendix E, Exhibit E-3)
- Facility Inspection Log (Appendix E, Exhibit E-4)
- Secondary Containment Checklist (Appendix E, Exhibit E-5)
- Tank Inspection Checklist (Appendix E, Exhibit E-6)

Records will be maintained by the personnel responsible for creating/completing the records.

16.2 Training Records

Training records are to be maintained as stipulated in Chapter 15.

- Training records on civilian personnel must be permanently maintained.
- Training records must accompany personnel transferred to another installation. These records must be kept for current employees as long as they work at the installation, and for three (3) additional years after the date they leave the installation.

16.3 Waste Turn-in Documents

Each DD Form 1348-1 will be maintained at the generating unit/activity and by the FS/HAAF IEC for a minimum of three (3) years.

16.4 Waste Analysis

Results from testing, waste analyses, and other determinations/profiles will be retained on file by the IEC for at least three (3) years (40 CFR 268.7(a) (8)). These results are of great value should the FS/HAAF be required to justify past actions or prove that sufficient effort was given to prevent noncompliance situations.

16.5 Hazardous Waste Profile Sheets (DRMS Form 1930)

Copies of DRMS Form 1930, or a DRMS approved automated equivalent, will be maintained by the IEC for three (3) years.

16.6 Transportation Documents

Transportation and shipping documents such as manifests and LDR forms are maintained at the FS/HAAF Environmental Office. These documents are prepared and processed under the supervision of the assigned DRMO representative and/or the IEC. Records must be maintained on file for at least three (3) years.

16.7 Spill Reports

Documentation of spills and releases must be maintained for at least three (3) years. These documents are of great value should FS/HAAF be required to provide information to the GAEPD on response actions to a spill. Activities will provide spill documentation to the IEC and the FS/HAAF Fire Department; see Chapter 18 for more information. The IEC will collect, organize, and maintain these records in the FS/HAAF Environmental Office.

16.8 Closure Plans

Closure Plans will be prepared by the IEC and maintained indefinitely for all HWSA and units/activities that cease to conduct HW management operations. These plans are required for the closure of any part of FS/HAAF. They are designed to minimize the need for further maintenance of the facility, and to protect human health and the environment. They are proof of what FS/HAAF has done to minimize or eliminate the possibility of release of HW, hazardous constituents, leachate, contaminated runoff, or HW decomposition of products through the ground, air, or water system. The development of a Closure Plan and all subsequent amendments are coordinated with applicable EPA or GAEPD personnel.

16.9 Biennial Hazardous Waste Report

A **Biennial Report** will be prepared by the IEC. It must be submitted to the State of Georgia (RCRA-authorized state) because Fort Stewart and HAAF are generators who ship hazardous waste off-site to TSD facilities. Federal and state regulations require that this report be submitted biennially, on March 1 of each even numbered year. Biennial reports must be on a State of Georgia approved form, and must cover activities during the two years. The report will include the following:

- Installation EPA identification number, name, and address
- The calendar years covered by the report
- A description and quantity of each hazardous waste generated during the calendar year
- The method for treatment or storage of each hazardous waste
- A certification, signed by the operator of the facility (or his authorized representative).

A copy of each Biennial report must be maintained on file and available for inspection by the state or the EPA for at least three years from the due date of the report, unless state regulations establish a longer time frame.

16.10 Manifest Exception Report

The IEC must submit an exception report to the GAEPD if a manifest has not been received from the HW transporter stating the date and place of departure from FS/HAAF within 45 days from the date the waste was accepted. The exception report must include a legible copy of the unreturned manifest and a cover letter signed by the generator explaining the efforts taken to locate the HW, and the results of those efforts. All copies must be maintained for the life of the facility.

16.11 Summary of Recordkeeping and Reporting Requirements

Recordkeeping and reporting requirements for FS/HAAF have been summarized in Table 16-1, Reporting Requirements and Table 16-2, Recordkeeping Requirements.

Table 16-1. Reporting Requirements

IEC	
Type of Report	Frequency
Agreements/non-agreements with local authority	Active life of facility
Data for Part A and Part B of permit	Active life of facility
Biennial report	2 years
Manifest exception report	Each event
Land Disposal Restriction Notification	Each Shipment
Permitted Facility (Bldg #1157)	
Type of Report	Frequency
Release from tank system or secondary containment system	Orally within 24 hours followed by written assessment report within 30 days
Certification of tank system repair	Within 7 days of resuming operation
Notice of waste receipt at new or expanded surface impoundment	60 days prior to receiving waste

Table 16-1. Recordkeeping Requirements

IEC	
Type of Record	Retention Period
Copy of each manifest	3 years
Test results	3 years
Waste analysis	3 years
Biennial report	3 years
Manifest exception report	Active life
Training records	Until closure or 3 years after employee last worked at facility
Contingency plan	Active life
Land Disposal Restrictions	5 years
EPA Identification Number	Active life
Permitted Facility (Bldg #1157)	
Type of Record	Retention Period
Notice to generator	Active life of facility
Operating record	Active life of facility
Inspection log	3 years after date of inspection
Personnel training records	Active life of facility or 3 years after employee last worked at facility
Manifest and/or shipping paper	3 years from date of waste delivery
Annual leak test for tanks systems without secondary containment	Active life of facility
Groundwater monitoring data	Active life of facility
Closure plan cost estimates	Annual update for life of facility
Contingency plan	Active life of facility
Waste analysis plan and analyses	Active life of facility
Ignitable, reactive, incompatible waste documentation	Active life of facility
Site inspection program	Active life of facility
Agreements/non-agreements with local authority	Active life of facility
Data for Part A and Part B of permit application	Active life of facility

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CHAPTER 17 WASTE MINIMIZATION

This chapter provides a brief overview of regulatory requirements and the FS/HAAF Environmental Policy. FS/HAAF's policy is to reduce the quantity, volume, and toxicity of wastes generated by operations and activities. Emphasis is placed on pollution prevention through waste minimization and waste reduction whenever possible. The FS/HAAF Pollution Prevention Plan addresses specific waste minimization opportunities and should be referenced for additional information.

17.1 Regulatory Requirements

Some of the following requirements are also presented in Chapter 3, Regulations, Directives, and References; along with other major laws and drivers impacting FS/HAAF's waste management program.

17.1.1 Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The CERCLA and SARA regulate prevention, control, and compensation of environmental pollution. This act is commonly referred to as "Superfund" and regulates the cleanup of contaminated HW sites and releases of hazardous substances into the environment. The CERCLA list of hazardous substances is published in 40 CFR Part 302 and in 49 CFR Part 172.101, Appendix A. The Defense Environmental Restoration Program is the DOD program that implements CERCLA.

17.1.2 Hazardous and Solid Waste Amendments of 1984

The HSWA, enacted in 1984, reauthorized and amended RCRA and imposed new and far-reaching requirements for the management of HW. The amendments established programs to regulate small quantity generators of HW (between 100 and 1,000 kg of waste/month), restricted land disposal of HW, established minimum technology requirements for land disposal units, required corrective actions for releases of HW, regulated USTs containing petroleum products or hazardous substances, initiated listing of new materials as HWs, and set deadlines for the EPA to issue or deny HW facility operating permits.

17.1.3 Pollution Prevention Act of 1990

The Pollution Prevention Act establishes as the policy of the United States that, whenever feasible, pollution should be prevented or reduced at the source. It states that pollution which cannot be prevented should be recycled in an environmentally safe manner; that pollution that cannot be prevented or recycled should be treated in an environmentally safe manner; and that disposal or other release into the environment of waste should be employed only as a last resort, and should be done in an environmentally safe manner.

17.1.4 Executive Order (EO) 13423, “Strengthening Federal Environmental, Energy and Transportation Management,” January 2007

E.O. 13423 sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reduction, recycling, sustainable buildings, electronics stewardship, vehicle fleets, and water conservation. It requires Federal agencies to lead by example in advancing the nation’s energy security and environmental performance. It also requires use of the EMS as the framework for managing and continually improving sustainable practices. The EO consolidates five prior EOs (13101, 13123, 13134, 13148, and 13149) and integrates the sustainable practices of those orders into a more cohesive approach for environmental and energy management.

- **Vehicles.** Use plug-in hybrid (PIH) vehicles when commercially available at a cost reasonably comparable, on the basis of life-cycle cost, to non-PIH vehicles.
- **Petroleum Conservation.** Reduce petroleum consumption in fleet vehicles by 2% annually through the end of fiscal year (FY) 2015, relative to the agency baseline for FY 2005. (Updates expired goals of EO 13149.)
- **Alternate Fuel Use.** Increase alternative fuel consumption (non-petroleum based) at least 10% annually, relative to the agency baseline for FY 2005.
- **Energy Efficiency.** Reduce energy intensity by 3% annually or 30% by the end of FY 2015, relative to the baseline of the agency’s energy use in FY 2003. The new 30% energy efficiency goal seeks to achieve in 10 years the same level of improvement that Federal agencies achieved in the last 20 years and is 50% more stringent than the goal in the Energy Policy Act of 2005. Energy intensity is the energy use per square foot of building area.
- **Greenhouse Gases.** Reduce greenhouse gas emissions through reduction of energy intensity by 3% annually or 30% by the end of FY 2105, relative to the baseline of the agency’s energy use in FY 2003. (Will be realized through other EO goals that will exceed the prior 30% goal set in EO 13123.)
- **Renewable Power.** At least 50% of current renewable energy purchases must come from new renewable sources (in service after 1 January 1999); and to the extent feasible, the agency implements renewable energy generation projects on agency property for agency use. Note, the Energy Policy Act of 2005 sets a renewable energy goal but does not require that any percentage come from new sources. The prior EO 13123 set a goal of 2.5% for renewable power purchases.
- **Building Performance.** Ensure that new construction and major building renovations comply with sustainability strategies, including resource conservation, reduction and reuse; siting; and indoor environmental quality, and 15% of the existing Federal capital asset building inventory of the agency as of the end of FY 2015, incorporate the referenced sustainable practices. The order makes mandatory the elements of the High

Performance Buildings Memorandum of Understanding signed by 19 agencies in January 2006.

- **Water Conservation.** Beginning in FY 2008, reduce water consumption intensity by 2% annually through the end of FY 2015, or 16% by the end of FY 2015, relative the baseline of the agency's water consumption in FY 2007. Prior orders did not include such a goal. Water intensity is the water use per square foot of building area.
- **Procurement.** Expand purchases of environmentally-sound goods and services, including biobased, environmentally preferable, energy-efficient, water-efficient, and recycled-content products; and require use of paper of at least 30% post-consumer fiber content. The new EO and guidance require agencies to integrate four existing disparate purchasing requirements into an integrated Federal purchasing effort that applies to all types of acquisitions of goods and services. Federal purchasing of energy efficient, recycled content, biobased, and environmentally preferable products will increase as a result. The EO also continues the requirement that agencies purchase office paper containing 30% post-consumer fiber.
- **Pollution Prevention.** Reduce the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency, increase diversion of SW as appropriate, and maintain cost-effective waste prevention and recycling programs in its facilities.
- **Electronics Management.** Annually, 95% of electronic products purchased must meet Electronic Product Environmental Assessment Tool standards where applicable; enable Energy Star® features on 100% of computers and monitors; and reuse, donate, sell, or recycle 100% of electronic equipment that has reached the end of its useful life using environmentally sound management practices. The order makes mandatory the elements of the 2004 Federal Electronics Stewardship Memorandum of Understanding signed by 12 agencies and the Executive Office of the President.
- **Environmental Management Systems.** Implement EMS at all appropriate organizational levels to ensure use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities. The EMS objectives shall include the goals identified in Section 2 of the EO.

17.1.5 DOD Memorandum, "Revised Pollution Prevention and Compliance Metrics," 12 Oct 2004

The Assistant Deputy Undersecretary of Defense for Environment, Safety, and Occupational Health issued a memorandum that revised the P2 and compliance metrics in October 2004. This established DOD compliance metrics to measure progress in the P2 and compliance programs in support of the defense mission. Each environmental program area has a set of broad overall goals with specific metrics to measure DOD's progress towards meeting the goals. The metrics process requires continuous review and periodic adjustments, as necessary. The P2 and compliance programs focus on enhancing and sustaining the mission by:

- Supporting the warfighter today and in the future.
- Ensuring adequate resource capability for the warfighter.
- Improving human health and the environment.
- Influencing the acquisition and weapon system life-cycle process.
- Making efficient investments in P2.
- Conducting operations in a cost-effective manner.

17.1.6 Army Regulation 200-1, Environmental Protection and Enhancement

AR 200-1 establishes policies and procedures to protect and preserve the quality of the environment. It outlines environmental responsibilities for the Department of the Army major commands and installations. It also defines the Army's goal of continually reducing the generation of HW and procedures for managing those wastes, including waste identification, records management, waste disposal, and training programs.

17.1.7 DA Pamphlet 200-1

DA PAM 200-1 supplements AR 200-1 with specific requirements on how to implement and manage the Army's environmental programs.

17.2 FS/HAAF Pollution Prevention Policy

FS/HAAF is committed to an active policy of protecting the environment in all of our activities. This pollution prevention policy statement is based on our commitment to the following:

1. Efficiently accomplishing our mission.
2. Ensuring a safe and healthy workplace for our staff.
3. Providing a clean and safe environment in our community.
4. Complying with all applicable laws and regulations.
5. Reducing future liability for waste disposal.
6. Reducing waste management costs.
7. Protecting stormwater quality.

To accomplish these objectives, we will implement programs for reducing or eliminating generation of waste through source reduction and other pollution prevention methodologies. This policy extends to air, wastewater, and solid and hazardous wastes. In addition to meeting the objectives, there are other important benefits related to pollution prevention. FS/HAAF is committed to reducing the weight and toxicity of generated wastes. As part of this commitment, FS/HAAF gives priority to source reduction. Where source reduction is not feasible, other pollution prevention methods, such as recycling, will be implemented where feasible. The wastes that cannot be prevented will be converted to useful products or used beneficially, where

feasible. Remaining wastes for which no pollution prevention option is warranted will be effectively treated (to decrease volume or toxicity) and responsibly managed. FS/HAAF will select waste management methods that minimize present and future effects on human health and the environment. Pollution prevention is the responsibility of all our staff. FS/HAAF is committed to identifying and implementing pollution prevention opportunities through solicitation, encouragement, and involvement of all employees.

17.3 FS/HAAF Sustainability Policy

The mission of Fort Stewart (FS) and Hunter Army Airfield (HAAF) is to provide a safe, secure, and responsive community that enhances the Fort Stewart/Hunter Army Airfield power projection platform in support of national security objectives. To ensure the continuing ability to perform this critical mission, the soldiers, civilians and contracted personnel working on FS/HAAF must:

- Prevent pollution;
- Conserve natural resources;
- Comply with federal, state and local laws and regulations; and
- Strive to continually improve environmental stewardship.

FS/HAAF is committed to simultaneously optimizing performance of the mission, well-being of soldiers, family members and the surrounding communities, and impact on the environment. To achieve this goal, FS/HAAF will establish, implement and maintain an effective, integrated Sustainability Management System.

17.4 Waste Reduction/Minimization Practices

Waste minimization is any change in a process that reduces or eliminates the amount of waste generated or reduces the toxicity of the waste that is generated. Waste minimization changes that reduce the volume or toxicity of a HW can result in lower treatment and disposal costs, a decrease in the long-term liability associated with disposing of HW at off-site disposal facilities, and provide a safer work place by reducing the exposure of workers to HMs.

Waste reduction is accomplished by substitution of a material with one having less of an environmental impact, or changing a process so that it uses less hazardous materials. This practice is often the simplest to implement since no or little additional cost is required. Methods of reduction relevant to installation activities include:

- All serviceable excess-packaged POL products are turned in to the HAZMART pharmacy within 10 working days after the Basic or Operational load authorized stock levels have changed or when the product is no longer needed to accomplish the mission.

- Implementation of shelf life management practices in accordance with DOD 4140.27-M and FED-STD-793A for GSA proprietary products.
- Minimize the use of solvents that generate hazardous waste through substitution of less environmentally hazardous products (i.e., replacement of MILSPEC PD-680 solvents with MILSPEC PRF-680) or through solvent recycling efforts (i.e., implementation of more efficient operations, such as standardized usage of Clarus Parts Washers).
- Continued operation of Command Recycling Program that is designed to reduce waste generation by 40% from all units/activities, tenants and housing areas located on FS/HAAF. The FS/HAAF Policy Memorandum #8, Command Recycling Policy, dated 12 Feb 2007, describes the Command's Recycling Program. This policy can be accessed via the FS/HAAF internet site at the following URL address:
<http://www.stewart.army.mil/ima/sites/directorates/DPW/environment.asp>.

17.5 Packaged POL Program

The FS/HAAF Directorate of Logistics (DOL) manages and operates a Hazardous Material Management Program, or HAZMART, to manage hazardous materials being used and stored on the installation. Operation of the HAZMART reduces acquisition costs, reduces waste generation from overstocked/expired product, reduces risk to personnel and facilities by limiting the amount of HM stored on-site, and enhances regulatory compliance by tracking the use of HM from "cradle to grave."

The HAZMART issues HM from a centralized location instead of allowing individual tenants and users to maintain excessive inventories which are sometimes allowed to expire and become waste. Hazardous materials managed through the HAZMART are mainly all Class III(P) supplies (packaged products, greases, oils, and lubricants) and a limited amount of HM common to the majority of participating units/activities. All products issued from the HAZMART are bar-coded for tracking purposes and have at least 90 days of shelf-life remaining.

All units/activities (Divisional, Non-Divisional units and civilian agencies) at FS/HAAF must request, receive and turn-in excess packaged petroleum products through the HAZMART located at Bldg #1146 on Fort Stewart. All new units/activities coming to FS/HAAF are encouraged to contact the HAZMART Program Lead at (912) 767-1594 for assistance in setting up an account with the HAZMART.

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CHAPTER 18

SPILL AND CONTINGENCY PLANNING

This chapter provides a brief summary of actions and procedures that all personnel must implement in the event of a spill. As required by Federal and State regulations, FS/HAAF maintains an Installation Spill Prevention Control and Countermeasure Plan (SPCCP) and Installation Spill Contingency Plan (ISCP). The FS/HAAF Oil and Hazardous Substance Spill Prevention and Response Plan (SP&R) is a single operational source document designed to meet the combined regulatory requirements for a U.S. EPA Facility Response Plan, and EPA SPCCP, and a U.S. Army ISCP. The SP&R is designed to minimize hazards to human health and the environment from unplanned releases of HM or HW to soil or surface water. The SP&R should be referenced and adhered to in the event of a spill. Copies of the SP&R are available from the IEC. The FS/HAAF SP&R must be referenced and followed for all spill reporting and agency notifications.

18.1 Introduction

FS/HAAF lies within the Georgia coastal watershed. Fully one third of the acreage of Ft. Stewart is comprised of designated wetlands under the protection of the federal government or the State of Georgia. These wetlands and the whole coastal watershed constitute a very sensitive ecosystem, home to a huge range of species, some of which are protected, most of which are sensitive to pollution. The EPA defines an environmental incident as:

“The release or the threat of release of a substance that poses an imminent and substantial danger to the public’s health, welfare, or the environment.”

A spill at FS/HAAF will typically involve a petroleum product such as fuels and lubricants, antifreeze, acid or other hazardous substances. Every spill, whether it is one in which you played a role (a “caused” spill) or one which you discover in a common area or on a public road/trail (a “discovered” spill) requires a response. This response must begin within 30 minutes (no exceptions) of cause or discovery; and should occur in the following general sequences.

18.2 Spill Response Sequences

The following describes the steps to take during a spill event:

18.2.1 Discovered Spills

1. Report the spill to the FS/HAAF Dispatch Center by calling **911** if using a “hard wired” phone or **(912) 767-2822** if using a cell phone.
2. Remain on the spill site or rendezvous as instructed by the Dispatch Center go guide first responders to the site.

If you are not asked to guide first responders to the site of a discovered spill, your responsibilities for response are fulfilled when you have completed your report call. If you are asked to guide first responders to the site, your responsibilities are fulfilled when you have rendezvoused with the first responders and answered any questions they may have about your discovery.

18.2.2 Caused Spills

1. Warn personnel who may be in danger; evacuate the area of the spill if necessary.
2. Shut off ignition sources such as running motors, electrical power or welding operations.
3. Stop the source of the spill by shutting down pumps, closing valves, plugging holes, etc., if you can do it safely.
4. Contain the flow of the spill on pavement or soil, such as digging a shallow trench in soil down-slope of the spill, or laying a dam of absorbent such as dry-sweep or absorbent socks or pads on pavement down-slope of the spill. Protect down-slope storm water drainage features such as a storm water drain grate, with appropriate absorbents.
5. Report the spill if required by calling the FS/HAAF Dispatch Center at **911** if using a “hard wired” phone or **(912) 767-2822** if using a cell phone.
6. Complete the spill cleanup by using appropriate absorbents if the spill is on pavement, or by excavating and containerizing (using bags or drums) contaminated soil if the spill is in soil.
7. Dispose of used absorbents or contaminated soil in compliance with established policy.

ALWAYS USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) DURING SPILL RESPONSES. IF YOU ARE NOT ABSOLUTELY CERTAIN HOW TO RESPOND, ESPECIALLY, TO NON-POL HAZARDS, REPORT THE SPILL AND GET HELP.

18.3 Spill Reporting Criteria and Procedures

18.3.1 Garrison Area

Report all spills of five (5) or more gallons (the user will make the initial judgment regarding the quantity of the spill), OR if any quantity (even a thimble-full) of the spilled substance enters a storm water drainage feature such as a drain grate, outfall, drainage swale or channel (whether wet or dry). Call the FS/HAAF Dispatch Center at **911** if using a “hard wired” telephone or **(912) 767-2822** if using a cell phone.

18.3.2 Training Area and Ranges (In The Field)

Report ALL spills regardless of quantity or location to Range Control by radio (**FM 48.50 or 46.10**) or telephone (**912) 435-8777/8100**.

18.4 Installation Support

Every report of a spill triggers a response generated at the installation level. If the information you provide during your report indicates any health, safety or fire hazard the Dispatch Center will send the Fire Department. IEC, usually in the person of an assigned environmental compliance inspector, will respond to every reported spill. That person will assess the spill situation and summon additional resources as necessary to complete the spill cleanup. In the case of “discovered” spills, the IEC will provide all the resources needed for cleanup. For “caused” spills the responsible unit/activity will provide the necessary manpower, and the IEC will provide all additional resources necessary to complete the cleanup.

18.5 General Responsibilities

18.5.1 FS/HAAF Employees

It is the responsibility of all persons working on FS/HAAF to:

- Employ safe practices when handling and using HM and POL liquids.
- Be familiar with basic spill response procedures and function as the first responder in the event of a spill.
- Know the location of response and cleanup supplies at their work location.
- Report any spills that occur to the FS/HAAF Dispatch Center by calling **911** if using a “hard wired” telephone or **(912) 767-2822** if using a cell phone.
- Assist the Fire Department as necessary with spill response efforts.
- Report any unsafe practices or potential causes of a spill to the FS/HAAF Environmental Division.

18.5.2 Incident Commander

The FS/HAAF Fire Department, in cooperation with the IEC, serves as the initial responder to all spills reported at FS/HAAF. The Senior Fire Officer (SFO) is designated as the Incident Commander (IC) and is the individual in charge of the spill scene and activating initial response actions. The individual assigned the position of IC may change throughout a spill incident. However, such changes will be clearly communicated to all parties involved in the spill response. The IC will:

- Assume duties as the Acting Installation On-Scene Coordinator (IOSC) until the DES or another designated individual assumes these specific responsibilities.

- Use best judgment to decide what physical and personnel resources will be activated to respond to the spill.
- Manage and coordinate the containment and cleanup of the spill.
- Manage and coordinate the sustained actions required to clean the spill site.
- Coordinate with the Installation On-Scene Coordinator (IOSC) to facilitate obtaining internal and external assets and meet reporting requirements.
- Coordinate with the IOSC on transitioning the incident between phases of response.
- Gather all necessary information of the incident in order to complete an incident log.
- Ensure that appropriate PPE is worn by responding personnel.

18.5.3 Installation On-Scene Coordinator

The Chief of the Directorate of Emergency Services (DES), with the cooperation and support of the IEC, serves as the IOSC for all spills and has full authority to direct and coordinate all control efforts at the scene. The mission of the IOSC is to allow the IC to concentrate on physical response actions. The IOSC functions as the primary point of contact in the event of a spill and is responsible for:

- Ensuring the IC has sufficient resources to contain, control, and cleanup a spill.
- Providing copies of SDSs to local emergency agencies and ensuring that copies are available for use by all personnel.
- Determining the appropriate level of the spill and making any notifications required, including State agencies and the National Response Center (NRC), as appropriate.
- Providing management oversight of long-term cleanup actions.
- Obtaining and coordinating necessary funds for long-term cleanup actions.
- Ensuring spills are cleaned-up in accordance with applicable laws and regulations.
- Supporting the IC as a point of contact for reporting spills to the EPA, the GAEPD, the GA Emergency Response Committee, and/or the local Emergency Planning Committee, as required by regulation.

18.5.4 Installation Response Team

The Installation Response Team (IRT) is the installation-wide structure for responding to spills or threats of spills at FS/HAAF. The IRT includes personnel trained and equipped to control and

clean up spills, such as the fire department, as well as staff members with specialized skills (e.g., public affairs and preventive medicine).

- Provides the installation-wide response to a spill at FS/HAAF. Depending upon the size and effects of the spill, the IOSC can activate the entire IRT structure or selection portions (reference SP&R Plan, Annex H, Spill Response Organization and Duties).

18.5.5 DFSP GOCO Hunter AAF Operations

- DFSP GOCO Hunter AAF personnel are the initial responders to all reported incidents originating in the DFSP GOCO Hunter AAF Bulk Fuel Storage, the Hunter AAF Pipeline or the rapid refuel area on the runway.
- The initial individual on scene shall notify the DFSP GOCO supervisor, who shall be the Incident Commander until another designated individual assumes these specific responsibilities.
- The DFSP QI has full authority to direct GOCO personnel and DESC contracted response resources, to complete all required federal, state, and local notifications, and other steps necessary to mitigate any event.

18.6 Notifications

Supervisors and/or personnel for petroleum or hazardous substance storage or handling at FS/HAAF and who discover a spill are required to take action to stop the flow, contain the spill, and clean up the discharge. If they are unable to safely and completely take these initial actions, they shall notify the FS/HAAF Dispatch Center by calling **911** if using a “hard wired” telephone or **(912) 767-2822** if using a cell phone. The FS/HAAF Dispatch Center will notify all key responders in accordance with the FS/HAAF SP&R plan.

Information to have available when contacting the FS/HAAF Dispatch Center include:

- Name and phone number of the person placing the call.
- Location of spill.
- Type and estimated amount of material spilled.
- Local discovery time and date of incident.
- Cause of incident and equipment and facility involved.
- Injuries and/or property damage.
- Duration of discharge.

- Receiving stream of waters.

18.7 Spill Kits

18.7.1 Units/activities will maintain spill response supplies on-hand that are sufficient to manage accidental spills of materials used in their areas. These activities include vehicle maintenance and fluid changing, refueling operations, used oil storage, and building maintenance.

If funds are available the IEC will replenish/supply spill kits (containers and contents). If no funding is available, units/activities must fund their own spill kits and replenish them as needed (following each use).

18.7.2 At a minimum each spill kit should consist of the following items:

- One 55-gallon weather proof container
- One (1) 50-lb bag dry sweep
- Twenty (20) absorbent pads
- Six (6) or twelve (12) absorbent socks

The following items may also be contained in the spill kit; however, will not be funded by the IEC:

- Shovels
- Brooms
- Protective Gloves
- Eye Protection

Dry sweep and absorbent pads can be procured through the supply system using:

- NSN 7930-00-269-1272, Dry Sweep
- NSN 4235-01-158-3502, Pad Absorbent 17" x 17"
- NSN 4235-01-308-5150, Mat Absorbent 20" x 16"
- NSN 4235-01-219-7414, Oil Absorbent Mat

You may keep the spill kit in your HAZMART locker or UPP Locker as long as it doesn't interfere with storage space and is accessible for immediate response to an accident/spill.

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APPENDICES

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APPENDIX A HAZARDOUS WASTE PROFILE SHEETS

A Hazardous Waste Profile Sheet (HWPS) is completed for all waste streams at FS/HAAF. DRMS Form 1930 is the official HWPS used by the IEC to document HW characterization, information for waste acceptance and disposal programs. The DRMS form is the standard form used for characterizing and quantifying HW for all disposal actions, regardless of whether or not the DRMO is the disposal agent.

A copy of DRMS Form 1930 is provided in Figure A-1 and consists of two parts:

- Part I – Identifies the unit/activity generator name and the waste
- Part II – Identifies the waste characteristics

Detailed instructions for completing DRMS Form 1930, as authorized in DOD 4160.21-M, Chapter 10, par. Dd.2.a. (3), follows:

PART I

A. General Information

Waste Profile Number – A unique number is assigned to this waste stream for future reference. The preferred format is the Generator DoDAAC + five digit serial number assigned by either the Generator or the IEC/DRMO. Any variation from this format must be approved by the IEC/DRMO.

- **Generator Name** – Enter the name of the generating facility. (Should match official name associated with the EPA ID number).
- **Facility Address** – Enter the address of generating facility listed in block A.1.
- **Zip Code** – Enter the generating facility’s five or nine-digit Zip Code.
- **Generator USEPA ID** – Enter the 12-character, alpha-numeric descriptor issued by the USEPA to the facility identified in block A.1. (If not applicable, enter “NONE”).
- **Generator State ID** – Enter the descriptor issued by the Resident State to the facility identified in block A.1.
- **Technical Contact** – Enter the name of the person to contact for more information about this waste.
- **Title** – Enter the Technical Contact’s official title (e.g., “HW-Manager”, “Shop Chief”, etc.).
- **Phone** – Enter the Technical Contact’s telephone number.

B. Waste Information

- **Name of Waste** – Enter a name that is generally descriptive of this waste (e.g., paint wastes, oil-water separator sludge, PCB-contaminated dirt, etc.).
- **A. USEPA Waste Code(s)** – List all that apply. If non-RCRA, enter “NONE.”

- B. State/Local/Host Nation Waste Codes(s)** – List all that apply. If non-RCRA, enter “none.”
- **Process Generating Waste** – List the specific process/operation or source that generates this waste (e.g., paint-booth spray, PCB spill, metal plating operation, etc.)
 - **Projected Annual Vol** – The quantity of waste projected for turn-in annually (preferably in pounds, but other units of measure may be used, e.g., gallons, kilograms, etc.).
 - **Mode of Collection** – Describe the method used to collect and store this waste stream (e.g., drums, tanks, roll-off, etc.).
 - **Dioxin Waste?** – Storage and disposal of Dioxin wastes requires special attention, if this waste is a USEPA-listed Dioxin waste, indicate “YES”, and contact your DRMO representative for further instructions.
 - **A. Is this waste restricted from land disposal?** – Check “YES” or “NO.”
 - **B. Has an exemption been granted?** – If “YES”, explain in Part II, block 6, at “Explain how and why these documents comply with RCRA requirements.”
 - **C. Does the waste meet applicable treatment standards already?** – If “YES”, explain in Part II, block 6, at “Explain how and why these documents comply with RCRA requirements.”

PART II

1. Material Characterization

1. **Color** – Describe the color of the waste (e.g., blue, clear, varies, etc.).
2. **Density** – The specific gravity of water is 1.0. Most organics are less than 1.0. Chlorinated solvents, most inorganics, and paint sludge are greater than 1.0.
3. **BTU/LB** – This entry may be required if you request that this waste be used as a fuel substitute.
4. **Total Solids** – Content can be expressed as either a weight percentage, or dry-weight concentration (mg/kg).
5. **Ash Content** – This entry may be required if you request recovery of used oil.
6. **Layering** – Check applicable box. Multi-layered means more than two layers (e.g., oil/water/solvent/sludge). Bilayered means the waste is comprised of two layers which may or may not be the same phase (e.g., oil/water solvent/sludge). Single phase means the waste is homogeneous.

2. RCRA Characteristics

Physical State – If none of the four boxes apply, a description should be entered in the space after “Other.”

Other Characteristics – See below.

Ignitable – Check this box if the waste meets the criteria listed at 40 CFR 261.21.

Corrosive – Check this box if the waste is corrosive as defined in 40 CFR 261.22.

--If applicable, include the pH reading in the space provided. (40 CFR 261.22(a) (1).

Reactive – Indicate whether the waste is reactive as defined in 40 CFR 261.23. If so, indicate the reason by checking the appropriate box. If other than one of the reasons provided, explain in detail at Part II, “Special Handling Information.”

Flash Point – For liquids, list the flash point, *regardless of whether the waste is ignitable (D001) or NOT.*

Toxicity Characteristic – If the waste exhibits the characteristic of toxicity, as defined in 40 CFR 261.24, check the appropriate box (high or low).

Treatment Group – Check the appropriate block for wastewater or non-wastewater.

3. Chemical/Material Composition

CAS # - Chemical Abstract Number. (Optional) May be used instead of the chemical name in the “Component” block.

Component – List all chemical and material components and contaminants.

--Examples of chemical components and contaminants:

- “PCB’s”, “methanol”, “oil”, “endrin”, “sodium chloride”, “naphthalene”, “gasoline”, etc.
- Applicable F-listed constituents; e.g., for waste numbers F001-F005, the waste constituents of concern are the solvents themselves.
- Applicable Underlying Hazardous Constituents (UHC). For certain characteristic waste numbers, D001-D043, you may have to examine the waste components for UHCs. Look in 40 CFR, Table 268.40. If the treatment standard given includes the words “*and meet 268.48 standards*”, then you must indicate any UHCs present in the waste *if they are present above the levels specified in part 268.48.*

--Examples of material components and contaminants: water, dirt, sand, paint sludge, rags, etc.

Concentration – Use this column for constituents of concern which do not exceed 10,000 ppm (1%). Indicate the concentration level in ppm or mg/L.

Range – For components comprising greater than or equal to 1% of the total waste stream, estimate the range (in percent) in which the component is present. The total maximum values of the components must be greater than, or equal to 100%, including chemical and material components.

4. Shipping Information – Refer to 49 CFR 172 to complete this part.

NOTE: Information provided in this portion of the waste profile is not meant to constitute a standard USDOT certificate given by a shipper offering a package to a transporter, but is needed to identify any other health and safety hazards, which are not readily apparent from the basic waste description.

5. Special Handling Information – Describe those hazards which you know or reasonably believe are or may be associated with short term or prolonged human exposure to this waste (29 CFR 1910.1200). If known, please identify any carcinogens present in this waste in excess of 0.1% (29 CFR 1910.1200(d) (4)). Failure to make an entry in this part is considered to be a representation that you neither know nor believe that there are any adverse human health effects

associated with exposure to this waste. Also include any additional information that will aid in the management of this waste.

6. Generator Certification *(Required)*

Chemical Analysis – Attach a copy, if applicable (see Note below).

User Knowledge – User knowledge is appropriate when it can be documented (e.g., in-out logs, published information, SDS, process production information, etc.). There is room provided to explain “what” and “why” user knowledge is used in lieu of analysis.

Certification – Include the PRINTED NAME of the person providing the Certification Signature.

Signature – An authorized representative of the generator must sign and date this certification on the completed Hazardous Waste Profile Sheet.

Date – Date signed by the Certifier*.

*** This Hazardous Waste Profile Sheet (HWPS) may be used for subsequent turn-ins of the same waste stream, for a period of one year. If a turn-in date is more than a year past the Certification Date listed, the generator must either re-certify the HWPS, or provide a new HWPS, with the current date. See instructions at DOD 4160.21-M, Chapter 10, par. D.2.a. (3) (b).**

If you require assistance completing this form, please contact the IEC.

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APPENDIX B HAZARDOUS WASTE MANIFESTS

This section provides instructions for compliance with the EPA and the Georgia requirements for manifesting HW as required by 40 CFR 262 Subpart B and 40 CFR 268. These regulations specify requirements regarding selection of the appropriate manifest, how to complete a HW manifest, land disposal notifications which must accompany the manifest, and records and reports associated with the manifest.

Introduction

Hazardous waste manifests will be prepared by authorized IEC and DRMO personnel. Using a HW manifest serves three purposes:

1. The manifest is used to track shipments of HW. The manifest identifies the Army Installation which generated the waste, the transporter which transported the waste, and the permitted TSDF which ultimately treated, stored or disposed of the waste. Consequently, the manifest identifies who is responsible for the waste from point of generation through ultimate disposal.
2. The manifest provides information during transportation emergencies. Drivers are required to keep the HW manifest with them in the cab of their vehicles either in their immediate reach, or in a holder mounted on the inside of the door on the driver's side of the vehicle. During an accident or an inspection, information on the manifest may be used to identify the HW loaded on the vehicle and emergency procedures to follow to control a fire, spill or explosion involving the hazardous wastes.
3. The manifest is used as a basis for recordkeeping and reporting. Information on the FS/HAAF biennial report is obtained from the manifests. Additionally, a copy of a manifest must be submitted to the EPA if a shipment of hazardous wastes is not received by the designated TSDF, or if there are significant discrepancies between what was shipped and what was received by the TSDF.

The HW manifest is the shipping document that identifies the HW generator, transporter, and TSDF. It also describes the contents of the waste shipment. When a waste shipment leaves the installation, the manifest must be completed through block 17, Transporter 1. One copy of this "open" manifest must be kept on file at the installation which generated the waste and the remaining copies must be provided to the transporter. The open manifest accompanies the transporter to the designated TSDF. The transporter may also deliver the HW to additional transporters who will move the waste to the designated TSDF. After acceptance of the waste, the owner or operator of the TSDF must sign the manifest signifying receipt of the shipment. This signed (or "closed") manifest then is returned to the waste generator to complete the paper trail. If the transporter is unable to deliver the HW to the designated TSDF or to an alternate facility designated on the manifest, the installation must designate another permitted facility or instruct the transporter to return the waste.

Enough duplicate copies of the manifest should be completed by the HW generator to provide the generator, each transporter, and the designated facility with one copy for their records, plus an additional copy to be returned to the generator. Each closed manifest must be retained by the IEC for at least three years from the date the waste was accepted by the initial transporter.

Many states have adopted their own versions of the manifest, and require generators to submit manifest copies to the state. States may also require additional information on the manifest.

Hazardous Waste Manifest

A. The Manifest System

A HW manifest is required for all off-installation shipments of HW, or other shipments of HW along public highways.

B. Manifest Selection

Federal regulations require generators and transporters of HW and owners or operators of HW TSDFs to use the Uniform Hazardous Waste Manifest (EPA Form 8700-22) and, if necessary, the continuation sheet for both interstate and intrastate transportation. The IEC/DRMO will utilize the EPA Uniform HW Manifest for all HW shipments. The manifests will be obtained from EPA approved manifest providers/printers.

C. Completion of the Manifest

1. The Installation Commander (IC) and designated DRMO and IEC personnel have responsibility for the HW manifest. Unit/activity personnel are responsible for providing support where appropriate in obtaining any required information needed for proper completion of the form.
2. There are three parts to a Uniform HW manifest.
 - The top portion identifies the organization(s) generating the waste and identifies the wastes being manifested.
 - The middle portion identifies the transporter(s).
 - The bottom portion identifies the designated (destination) TSDF and information about the facility's treatment, storage or disposal of HW.

D. Instructions for Completing the Uniform Hazardous Waste Manifest

Part I: Instructions for Generators

Read all instructions before completing the form.

1. The form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.

2. Federal regulations require generators and transporters of hazardous waste and owners or operators of HW TSDFs to complete the manifest form (EPA Form 8700-22) and, if necessary, the continuation sheet (EPA Form 8700-22A) for both inter-and intrastate transportation of HW.

Item 1: Generator's U.S. EPA Identification Number

Enter the FS or the HAAF twelve-digit identification number issued by the EPA.

Item 2. Page 1 of.....

Enter the total number of pages used to complete the manifest (i.e., the first page (EPA Form 8700-22) plus the number of continuation sheets (EPA Form 8700-22A), if any.

Item 3. Emergency Response Phone Number

Enter a phone number from which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the FS or HAAF mailing address to which the completed manifest signed by the designated facility should be mailed, and the telephone number. Note, the telephone number (including area code) should be the normal business number, or the number where authorized personnel may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mail address.

Item 6. Transporter 1 Company Name and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here. If more than two transporters are needed, use a continuation sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on the manifest. Also enter the facility's phone number and U.S. EPA twelve-digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering and "X" in this item next to the corresponding hazardous material identified in 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the continuation sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table B-1 below for the type of container.

Table B-1. Types of Containers

Abbreviation	Type of Container
BA	Burlap, cloth, paper, or plastic bags
CF	Fiber or plastic boxes, cartons, cases
CM	Metal boxes, cartons, cases (including roll-offs)
CW	Wooden boxes, cartons, cases
CY	Cylinders
DF	Fiberboard or plastic drums, barrels, kegs
DM	Metal drums, barrels, kegs
DT	Dump Truck
DW	Wooden Drums, barrels, kegs
HG	Hopper or gondola cars
TC	Tank cars
TP	Portable Tanks
TT	Cargo Tanks (tank trucks)

Item 11. Total Quantity

Enter in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and do not enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure

Enter in designated boxes, the appropriate abbreviation from Table B-2 (below) for the unit of measure.

Table B-2. Units of Measure.

Abbreviation	Unit of Measure
G	Gallons (liquids only)
K	Kilograms
L	Liters (liquids only)
M	Metric tons (1000 kilograms)
N	Cubic meters
P	Pounds
T	Tons (2000 pounds)
Y	Cubic Yards

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal codes (Georgia has no special waste codes) to describe each waste stream identified in Item 9b.

Item 14. Special Handling Instructions and Additional Information

1. Special handling or shipment-specific information necessary for the proper management or tracking of the materials may be entered under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. FS/HAAF also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. FS/HAAF, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. Authorized FS/HAAF personnel must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: *"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgement of Consent."*
2. FS/HAAF personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

Part II: Instructions for International Shipment Block

Item 16. International Shipments

For export shipments, the primary exporter must check the export box, and enter the point of exit (city and state) from the United States. For import shipments, the importer must check the import box and enter the point of entry (city and state) into the United States. For exports, the transporter must sign and date the manifest to indicate the day the shipment left the United States. Transporters of hazardous waste shipments must deliver a copy of the manifest to the U.S. Customs when exporting the waste across U.S. borders.

Part III: Instructions for Transporters

Item 17. Transporters Acknowledgments of Receipt

Enter the name of the person accepting the waste on behalf of the first transporter. That person must acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt. Only one signature per Transportation Company is required. Signatures are not required to track the movement of wastes in and out of transfer facilities, unless there is a change of custody between transporters.

If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person must acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt

Part IV: Instructions for Owners and Operators of Treatment, Storage, and Disposal Facilities

Item 18. Discrepancy

Item 18a. Discrepancy Indication Space

1. The authorized representative of the designated (or alternate) facility's owner or operator must note in this space any discrepancies between the waste described on the manifest and the waste actually received at the facility. Manifest discrepancies are: significant differences (as defined by §§ 264.72(b) and 265.72(b)) between the quantity or type of HW designated on the manifest or shipping paper, and the quantity and type of HW a facility actually receives, rejected wastes, which may be a full or partial shipment of HW that the TSDF cannot accept, or container residues, which are residues that exceed the quantity limits for "empty" containers set forth in 40 CFR 261.7(b).
2. For rejected loads and residues (40 CFR 264.72(d), (e), and (f), or 40 CFR 265.729(d), (e), or (f), check the appropriate box if the shipment is a rejected load (i.e., rejected by the designated and/or alternate facility and is sent to an alternate facility or returned to the

generator) or a regulated residue that cannot be removed from a container. Enter the reason for the rejection or the inability to remove the residue and a description of the waste. Also, reference the manifest tracking number for any additional manifests being used to track the rejected waste or residue shipment on the original manifest. Indicate the original manifest tracking number in Item 14, the Special Handling Block and Additional Information Block of the additional manifests.

3. Owners or operators of facilities located in unauthorized states (i.e., states in which the U.S. EPA administers the HW management program) who cannot resolve significant differences in quantity or type within 15 days of receiving the waste must submit to their Regional Administrator a letter with a copy of the manifest at issue describing the discrepancy and attempts to reconcile it (40 CFR 264.72(c).and 265.72(c)).
4. Owners or operators of facilities located in authorized states (i.e., those states that have received authorization from the U.S. EPA to administer the hazardous waste management program) should contact their state agency for information on where to report discrepancies involving “significant differences” to state officials.

Item 18b. Alternate Facility (or Generator) for Receipt of Full Load Rejections

The TSDF will enter the name, address, phone number, and EPA Identification Number of the Alternate Facility which the rejecting TSDF has designated, after consulting with the FS/HAAF, to receive a fully rejected waste shipment. In the event that a fully rejected shipment is being returned to FS/HAAF, the rejecting TSDF may enter the FS/HAAF site information in this space. This field is not to be used to forward partially rejected loads or residue waste shipments.

Item 18c. Alternate Facility (or Generator) Signature

The authorized representative of the alternate facility (or the generator in the event of a returned shipment) must sign and date this field of the form to acknowledge receipt of the fully rejected wastes or residues identified by the initial TSDF.

Item 19. Hazardous Waste Report Management Method Codes

Enter the most appropriate Hazardous Waste Management Method code for each waste listed in Item 9. The Hazardous Waste Management Method code is to be entered by the TSDF that receives the waste and is the code that best describes the way in which the waste is to be managed when received by the TSDF.

Item 20. Designated Facility Owner or Operator Certification of Receipt (Except as noted in Item 18a)

The TSDF will enter the name of the person receiving the waste on behalf of the owner or operator of the facility. That person must acknowledge receipt or rejection of the waste described on the manifest by signing and entering the date of receipt or rejection where indicated. Since the Facility Certification acknowledges receipt of the waste except as noted in

the Discrepancy Space in Item 18a, the certification should be signed for both waste receipt and waste rejection, with the rejection being noted and described in the space provided in Item 18a. Fully rejected wastes may be forwarded or returned using Item 18b after consultation with the generator. Enter the name of the person accepting the waste on behalf of the owner or operator or the alternate facility or the original generator. That person must acknowledge receipt or rejection of the waste described on the manifest by signing and entering the date the received or rejected the waste in Item 18c. Partially rejected wastes and residues must be re-shipped under a new manifest, to be initiated and signed by rejecting TSD as offeror of the shipment.

Completion of Continuation Sheets

Continuation sheets must be used if either of the following applies:

- More than two transporters are used to transport the waste; or
- More space is required for the U.S. DOT descriptions and related information in Item 9.

Most of the same information required on the manifest is also required on the continuation sheet to the manifest. Table A-3, Continuation Sheet, identifies the information that must be entered on the continuation sheet by the generator.

Table B-3. Continuation Sheet

Number	Information	Reference Item Number(s)
21	Generator's US EPA ID Number	1
22	Page ___ of ___	2
23	Manifest Tracking Number	4
24	Generator's Name	5
25-26	Transporter – Company Name and U.S. EPA ID Number	6, 7
27-31	U.S. D.O.T. Description Including Proper Shipping Name, Hazardous Class and ID Number (UN/NA); Containers (No. and Type); Total Quantity; Units of Measure (Weight/Volume); Waste Codes	9a, 9b, 10, 11, 12, and 13
32	Special Handling Instructions and Additional Information	14
33-34	Transporter – Acknowledgement of Receipt of Materials	17
35	Discrepancy Indication Space	18
36	Hazardous Waste Report Management Method Codes	19

Notification and Certification Required by the Land Disposal Restrictions

- A. Under the HSWA, Congress directed the EPA to prohibit all HW's from land disposal by 1990 unless the wastes are treated to specific treatment standards. The purpose of the land disposal restrictions is to prevent threats to human health or the environment caused by leaking land disposal facilities. The EPA was directed to follow a specific schedule in restricting wastes from land disposal and already has restricted the land disposal of most HW's including spent solvents, plating wastes, dioxin bearing wastes, acidic wastes, specific source wastes, and non-specific source wastes. In addition, the EPA has established treatment standards for almost all HW's, except those wastes which fail the Toxicity Characteristic Leaching Procedure (TCLP) but not the EP (i.e., D004-D011) and a few newly listed wastes such as certain wastes from carbamate and organobromide production.
- B. The regulations applicable to land disposal restrictions are published in 40 CFR 268. These regulations identify which wastes are restricted from land disposal, procedures for obtaining extensions to and exemptions from land disposal restrictions, the EPA's schedule for prohibiting specific waste codes from land disposal and establishing treatment standards, and prohibitions on the storage of restricted wastes.
- C. In general, dilution is prohibited as a form of treatment for land disposal restricted hazardous wastes. However, the EPA will continue to allow dilution of wastes that are hazardous only because they exhibit a characteristic and are treated in a system which discharges wastewater subject to an NPDES permit or an indirect discharge permit unless a treatment method has been specified as the treatment standard for the waste in 268.42 (e.g. deactivation for ignitable liquids).
- D. Land disposal notification. The IEC must complete the information required by the EPA on land disposal restrictions on the Hazardous Waste Profile Sheet (HWPS). This information can be located in Part 1 of the HWPS, or as a continuation sheet to Part 1 (in the latter case, the attachment must be clearly marked as such on the HWPS). The following EPA land disposal restriction requirements must be included on the HWPS at a minimum:
1. All treat-ability groups must be listed: e.g., wastewater and non-wastewater.
 2. List all EPA hazardous waste codes (listed and characteristic) contained within the waste stream (e.g. D003).
 3. List all subcategories if a waste has more than one waste code (e.g. reactive cyanide).
 4. List constituents to be monitored in wastes F001-F005, F039, D001, D002, D012-D043, or wastes subject to a California List prohibition.
 5. If a lab pack is involved, describe whether it contains a waste identified in Appendix IV to 40 CFR 268. Lab packing for turn-ins to the DRMO may not be done by the generating activity, but must be done by the DRMO contractor.

- E. The IEC also is responsible for ensuring that local procedures require that the HWPS is attached to the manifest along with the applicable land disposal notifications and certifications.

Exception Reports

If the IEC does not receive a copy of the manifest with the signature of the owner, operator, or authorized representative of the designated facility within 35 days of the date the HW was shipped off-installation, the status of the waste must be determined. The transporter and the TSDF must be contacted to confirm that the waste shipment was in fact delivered and accepted, and to obtain a copy of the manifest.

If the waste was not delivered or accepted, the location of the waste must be determined. Remember that the installation continues to be liable for its HW until the waste is no longer hazardous.

If the IEC does not receive a copy of the closed manifest within 45 days of the date the waste was accepted by the initial transporter, the IEC must submit an exception report to the state environmental agency or the EPA Regional Administrator.

1. The exception report must include:
 - A legible copy of the manifest for which you do not have a confirmation of delivery. A cover letter describing the efforts taken to locate the hazardous waste and the results of those efforts.

An installation exporting hazardous waste must submit an exception report to the EPA if a copy of the closed manifest has not been received on-installation within 45 days after the waste was accepted for shipment by the initial transporter. Alternatively, an exception report must be filed if a written confirmation of delivery has not been received from the consignee within 90 days, or if the waste is returned to the United States from abroad.

Discrepancy Reports

- A. Significant manifest discrepancies between the quantity or type of waste designated by the installation on the manifest and received by the TSDF should be resolved as soon as possible. Significant discrepancies in quantity for bulk waste are variations greater than 10 percent in weight, and for batch waste, any variation in piece count such as a discrepancy of one drum in a truckload. Significant discrepancies pertaining to the type of waste would be obvious differences, discovered by the TSDF, between the type of waste described on the manifest and the type of waste actually received, as well as differences discovered by inspection or waste analysis.

Upon discovering a significant discrepancy, the TSDF must try to reconcile the discrepancy with the transporter and the installation. All parties should work together to determine the true quantity and type of waste. The IEC will document discrepancy-related telephone conversations and keep copies of all correspondence and waste analyses concerning the discrepancy.

- B. If the discrepancy is not resolved within 15 days of receiving the waste, the TSDF must immediately submit a discrepancy report to the EPA. The discrepancy report must include:
 - 1. A letter describing the discrepancy and attempts made to reconcile the discrepancy.
 - 2. A copy of the manifest or shipping paper at issue.

Transporter Reports

A transporter who releases HW to the environment at or above the DOT reportable quantity during transportation must submit an incident report to DOT.

- A. In most cases, the state emergency response or environmental agency must also be notified. The transporter must also take appropriate immediate action to protect human health and the environment. Appropriate actions include absorbing a spilled waste or diking the area around a spilled liquid to preclude it from spreading.
- B. The IEC and DRMO will hold all contracted transporters accountable and ensure they comply with contact and/or legal requirements.

Figure B-1. EPA Uniform Hazardous Waste Manifest

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone		4. Manifest Tracking Number						
		5. Generator's Name and Mailing Address					Generator's Site Address (if different than mailing address)					
GENERATOR		Generator's Phone:										
		6. Transporter 1 Company Name					U.S. EPA ID Number					
TRANSPORTER INTL		7. Transporter 2 Company Name					U.S. EPA ID Number					
		8. Designated Facility Name and Site Address					U.S. EPA ID Number					
DESIGNATED FACILITY		Facility's Phone:										
		9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
DESIGNATED FACILITY			1.			No.	Type					
			2.									
			3.									
			4.									
DESIGNATED FACILITY		14. Special Handling Instructions and Additional Information										
		15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
DESIGNATED FACILITY		Generator's/Offeror's Printed/Typed Name				Signature				Month	Day	Year
		16. International Shipments		<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit: _____		Date leaving U.S.: _____				
DESIGNATED FACILITY		17. Transporter Acknowledgment of Receipt of Materials										
		Transporter 1 Printed/Typed Name				Signature				Month	Day	Year
DESIGNATED FACILITY		Transporter 2 Printed/Typed Name				Signature				Month	Day	Year
		18. Discrepancy										
DESIGNATED FACILITY		18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection										
		18b. Alternate Facility (or Generator)					Manifest Reference Number					U.S. EPA ID Number
DESIGNATED FACILITY		Facility's Phone:										
		18c. Signature of Alternate Facility (or Generator)										Month
DESIGNATED FACILITY		19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)										
		1.	2.	3.	4.							
DESIGNATED FACILITY		20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a										
		Printed/Typed Name				Signature				Month	Day	Year

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Figure B-1. EPA Uniform Hazardous Waste Manifest (cont sheet)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator ID Number	22. Page	23. Manifest Tracking Number					
24. Generator's Name									
25. Transporter _____ Company Name				U.S. EPA ID Number					
26. Transporter _____ Company Name				U.S. EPA ID Number					
GENERATOR	27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		28. Containers No. Type		29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes	
32. Special Handling Instructions and Additional Information									
TRANSPORTER	33. Transporter _____ Acknowledgment of Receipt of Materials			Signature		Month	Day	Year	
	Printed/Typed Name								
DESIGNATED FACILITY	34. Transporter _____ Acknowledgment of Receipt of Materials			Signature		Month	Day	Year	
	Printed/Typed Name								
35. Discrepancy									
36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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APPENDIX C WASTE ANALYSIS PLAN

The permitted HWSA at Fort Stewart (Bldg #1157) is authorized to receive HWs from FS/HAAF, DOD activities and other Federal agencies that have a Memorandum of Understanding with the organization, i.e., DLA/DRMS. This section describes the physical and chemical nature of HWs stored at the facility and summarizes the Waste Analysis Plan for sampling, testing, and evaluating waste streams. The Waste Analysis Plan, in its entirety is provided in the permit application and state approved permit maintained by the IEC.

Waste Identification

The DOD has issued specific regulations which govern the transfer of hazardous wastes and are applicable to all unit level generators of HWs that transfer such wastes to the HWSA for transport off the installation to a permitted TSDF. These regulations require that units/activities desiring to transfer HWs must properly identify the property so that the hazardous characteristics of the waste are immediately apparent to the HWSA. Each different waste must be accompanied by Unit Used Material Manifest that includes proper identification. If proper identification of such wastes is not provided, the HWSA will refuse the waste.

HWSA personnel have access to the following references to determine the hazardous characteristics:

1. NFPA Book (Fire Protection Guide on Hazardous Materials)
2. Chemical Dictionary
3. USCG "CHIL" Manual
4. North American Emergency Response Guidebook
5. NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards, NIOSH Pub #81-123 dated 1981, with Supplements I through IV
6. NIOSH Pocket Guide to Chemical Hazards, NIOSH Pub #94-116 dated 1994 with changes through 18 Apr 1994
7. Industrial Chart for Toxic and Hazardous Chemicals in Industry
8. EPA Document: "A Method for Determining the Compatibility of Hazardous Wastes."
9. Environmental Considerations in the DPDP Disposal Process, DPDS-M6050.1
10. DRMR Regional Environmental Specialist (who has more reference documents on hand).

Waste Characterization

Hazardous wastes at FS/HAAF are generated through routine maintenance operations and other military support functions; small industrial operations; elimination of materials whose shelf-lives have expired, that have deteriorated, or otherwise have been damaged; and wastes resulting from spill cleanup. In most cases, the hazardous designations of the wastes are based upon the known characteristics of the waste, such as ignitability, reactivity, corrosivity, or toxicity. For listed wastes, the hazardous designation is based upon the EPA listing and/or analytical sample results. The IEC maintains all sample results.

FS/HAAF does not routinely analyze typical wastes that are turned in for storage. Analysis is only performed if process changes have occurred in a generating unit/activity or if it is suspected that the waste streams contain new or unknown wastes. The processes used by the generating units/activities are not expected to change, so there should be very little variability in the composition of wastes. Waste characterization (and analysis if needed) is performed only once on representative samples of waste streams identified in **Table C-1** (unless re-verification is required).

Waste characterization information for wastes to be stored at the HWSA is documented on the HWPS for each process that generates a HW. DPW Env will routinely perform analysis when the process that generates HW changes or when new waste streams are introduced and complete the corresponding HWPS. Therefore, sufficient information is available for the proper handling of the wastes by FS before placing the waste in the HWSAs.

Waste analysis needs are determined by the general waste type as listed below:

1. **Outdated Virgin Material:** Unused material whose shelf-life has expired and which is readily identifiable from packing or SDS.
2. **Nonspent, No Longer Needed:** Unused material that is not needed for future use in the process.
3. **Nonspent, Leaking:** Unused material that has leaked from its container due to time, exposure, or accidental damage.
4. **Container Residuals:** Materials left in a container after emptying or material rinsed from an empty container.
5. **Spent, Known Contaminant:** Wastes generated through routine processes where both the starting product and the contaminant are known, and no chemical reaction is involved.
6. **Off-Specification Material:** Unused material that does not meet the specification required for the desired process. The deviation from specifications could be due to either manufacturing error or accidental contamination.
7. **Nonspent Mix or Virgin Materials:** A mixture of two or more unused materials that are not needed for future use at the installation.
8. **Contaminated With Water:** Waste streams generated through routine processes where the starting product is known and the only known contaminant is water.
9. **Waste from unknown or new waste streams** that contain no virgin or non-spent material.

Waste stream source types 1 through 8 do not require analyses, since the constituents and characteristics of these wastes are known based on user knowledge of the processes that generate them and/or prior analytical sampling results. Waste streams that contain waste types 1 through 8, and for which HWPSs have been prepared, require an annual review to verify the previous characterizations and ensure the container labels accurately reflect the contents and that each container is properly stored in its designated area within the facility.

If an unknown or new waste stream (type 9) is encountered, knowledge of the process or source of the waste is used to determine which of the characterization parameters listed in **Table C-1** will be analyzed for. If no information is available for a waste from an unknown source, the waste is evaluated fully for hazardous constituents and analyzed for suspected HW criteria.

Waste streams generated through non-routine or new processes where the starting product is unknown and/or the contaminant is unknown are required to undergo a complete analysis/evaluation in order to determine the chemical composition and characteristics for proper storage at the HWSA. The analysis/evaluation scheme for characterizing the contaminants in these types of waste streams centers around preparation of the HWPS. For non-routine waste streams resulting from unknown starting products and contaminants, analyses are performed to determine all applicable HWPS information necessary in order to properly store and dispose of the waste.

Every container of waste to be stored at the HWSA is sampled and analyzed prior to storage unless it is a waste from one of the eight known types of waste streams listed above and a HWPS has been prepared for the originating waste stream.

Table C-1. Waste Characterization Parameters and Rationale for Waste Streams at FS

Waste Stream	Characterization Parameter	Rationale	Waste Code
Degreasers:			
PRF-680 Solvent	I	FP<140°F	D001
Waste Petro Naphtha	I	FP<140°F	D001
Fuels:			
MOGAS	I	FP<140°F	D001
Contaminated Jet Fuel	I	FP<140°F	D001
JP-8	I	FP<100°F	D001
PCB Wastes:	I	TSCA-listed	N/A
Transformer Oil			
Halogenated Solvents: (Industrial Intermediate):			
Trichloroethylene	T	Toxicity	U228
Tetrachloroethylene	T	Toxicity	U210
Non-Halogenated Solvents (Industrial Intermediate):			
Methyl ethyl ketone	T	Toxicity	U159

Table C-1. Waste Characterization Parameters and Rationale for Waste Streams at FS

Waste Stream	Characterization Parameter	Rationale	Waste Code
Methyl isobutyl ketone Cleaner	T/I I	Toxicity/ FP<140°F FP<140°F	U161/D001 D001
Acetone Methanol Cleaning Compound (Stoddard Solvent)	T/I I I	Toxicity/ FP<140°F FP<140°F FP<140°F	U002/D001 D001 D001
Waste Coatings, Paints and Thinners:	I	FP<140°F	D001
Acrylic	I	FP<140°F	D001
Poly coating	I	FP<140°F	D001
Canvas coating	I	FP<140°F	D001
Primer coating	I	FP<140°F	D001
Polyurethane coating	I	FP<140°F	D001
Lacquer	I	FP<140°F	D001
Lacquer/Paint Thinner	I	FP<140°F	D001
Rust preventer	I	FP<140°F	D001
Corrosion preventer	I	FP<140°F	D001
Magnaglow	I	FP<140°F	D001
Floor Polish	I	FP<140°F	D001
Enamel Paint	I	FP<140°F	D001
Decontamination Agent (DS-2)	C	Corrosive	D002
Decontamination Agent (STB)	I	FP<140°F	D001
Pesticides:			
Chlordane	T/TCLP	Toxicity/TCLP	U036,D026
Lindane	T/TCLP	Toxicity/TCLP	U129,D013
Corrosives:			
Cleaner	C	Corrosive	D002
Activator	C	Corrosive	D002
Auto Battery Acid	C	Corrosive	D002
Laboratory Chemicals:			
Hydrochloric Acid	C	Corrosive	D002
Hydrofluoric Acid	C/T	Corrosive/Toxicity	D002/U134
Hydrofluosilic Acid	C	Corrosive	D002
Sulfuric Acid	C	Corrosive	D002
Sodium Iodate/Nitrate	C	Corrosive	D002
Calcium Hypchlorite	C/I	Corrosive/Ignitability (Oxidizer)	D002/D001
Chromic Acid	C/TCLP	Corrosive/Chromium	D002/D007
Preservative	I	FP<140°F	D001
Denatured Alcohol	I	FP<140°F	D001
Defoamer	I	FP<140°F	D001
Magnaflux	T	Toxicity (Halogenated Solvent)	F002

Table C-1. Waste Characterization Parameters and Rationale for Waste Streams at FS

Waste Stream	Characterization Parameter	Rationale	Waste Code
Carbon removing compound	T	Toxicity (Halogenated Solvent)	F002
Sodium Cyanide	H	Acute Toxicity	P106
Waste Batteries: Ni-Cad Batteries Lithium Batteries Mercury Batteries Lead-Acid Batteries	TCLP/C R TCLP TCLP/C	Cadmium/Corrosive Lithium Hg Pb/Corrosive	D006/D002 D003 D009 D008/D002
Carc Paint	I I	FP<140°F Non-Halogenated Solvents	D001 F005
Adhesives and Sealants: Epoxy Components Adhesive Sealants Solvent cement	I I I I	FP<140°F FP<140°F FP<140°F FP<140°F	D001 D001 D001 D001
Spill Residues: Mercury Mercury Containing Lamps	T TCLP	Hg Hg	U151 D009
Waste Kits: M229 M256 M258	C T TCLP I TCLP I	Buffer Solution Diethyl Phthalate Silver Nitrate Ethyl Alcohol Hg FP<140°F	D002 U008 D011 D001 D009 D001
M72 Training Kits: M72A1, SKAITS A1 M72A2, SKAITS A2 AN-M2 Water Test Kit M272 Water Test Kit	T T T TCLP I TCLP H TCLP H T	Dimethyl sulfate Benzenesulfony-chloride Dimethyl sulfate Mercuric Chloride Xylene/Acetone Mercuric Cyanide Potassium Cyanide Sodium Arsenite Potassium Ferrocyanide Epichlorohydrin (1-chloro-2,3-epoxypropane)	U103 D002/D002/ U020 U103 D009 D001 D009 P098 D004 P030 U041

Table C-1. Waste Characterization Parameters and Rationale for Waste Streams at FS

Waste Stream	Characterization Parameter	Rationale	Waste Code
Charcoal Filters	TCLP	Cr	D007
Lead Contaminated Limestone	TCLP	Pb	D008
Hospital Pharmaceuticals:			
Formaldehyde	T	Formaldehyde	U122
Leukeran	T	Chlorambucil	U035
Mixed Lab Pack (Waste)	T	Chloroform	U044
	T	Phenol	U188
	T	Resorcinol	U201
	H	Epinephrine	P042
	I	FP<140°F	D001
Mixed Lab Pack	T/I	Acetone	U002/D001
	T/I	Methanol	U154/D001
	T/I	Xylene	U239/D001
	T/I	Ethyl Acetate	U112/D001
Medical Lab Pack (Waste)	H	Epinephrine	P042
	T	Hexahloro-cyclohexane	U129
	T	Hg	U151
Waste Lab Pack	T	Chlorambucil	U035
	T	Melphalan	U150
	T	Reserpine	U200
	I	FP<140°F	D001
<p>^a Waste characteristic parameters: Source: Fort Stewart Waste Analysis Plan</p> <p>C= Corrosivity H=Acute Toxicity I=Ignitability R=Reactivity T=Toxicity TCLP=Toxicity Characteristic Leaching Procedure</p>			

Additional Requirements for Wastes Generated Off-Site

For any wastes received from off-site, personnel at the HWSA will inspect all waste shipments received at the facility in order to assure proper identification by the unit/activity. If there are no separated phases or settled solids in the paint or reagent grade chemicals, then the items will be accepted as Group I wastes. All shipments of Group I waste items will be visually inspected before acceptance to determine whether the containers have previously been opened and whether they contain their original labels. If the shipment is paint or reagent grade chemicals in opened

containers, each container will be visually inspected to ensure that no other wastes have been mixed with the material.

All other containerized wastes will be considered Group II wastes. The accuracy of the turn-in activities identification has been proven through feed-back received by DRMS disposal contractors.

A list of waste that may be received at the HWSA is provided in **Table C-1**. If any other wastes are to be received, the GAEPD will be notified prior to receipt of the waste. If feedback indicates that generator analysis is incorrect, then a verification testing program for wastes received from off-site will be initiated.

Units/activities will provide all information required to meet the DOD standard turn-in requirements for containerized wastes. This information enables proper handling and storage of HW. **Table C-2** identifies additional parameters for analyzing Group II wastes to verify identification and ensure proper storage.

Table C-2. Analytical Parameters - Group II Wastes Stored at Permitted HW Facility

Analytical Parameters
pH
Flash Point
Halides
Reactivity <ul style="list-style-type: none"> • Water • Cyanides • Sulfides
Physical Characteristics <ul style="list-style-type: none"> • Physical State • Color • Density

Test Methods

The test methods to be implemented to measure the parameters listed in **Table C-1** are summarized in **Table C-3**. The physical characteristics will be assessed by visual observation. Density will be tested through volume-to-weight ratios.

Table C-3. Test Methods Used To Measure Parameters Identified in Table C-2

Parameter	Test Method	Reference
pH	Electrometric Methods 5.2, 5.3	Test Methods for Evaluating Solid Waste; Physical/Chemical Methods, U.S. EPA SW-846
Flash Point	Pensky-Martens Closed-Cup Tester	ASTM Standard D-93-79 or D-93-80
Total Halides	Halogenated Volatile Organics, Total Organic Halides	Test Methods for Evaluating Solid Waste; Physical/Chemical Methods, U.S. EPA SW-846
Reactivity	Water Reactivity Cyanides Sulfides	EPA SW-846 Method 9010 EPA SW-846 Method 9030

Sampling Methods

The sampling methods which will be used for the Group II wastes are shown in **Table C-4** by the type of waste to be stored at the site.

Table C-4. Sampling Methods for Waste Stream Items Identified in Table C-1

Type of Waste	Guide Reference
Extremely viscous liquid	ASTM Standard D140-70
Crushed or powdered material	ASTM Standard D346-75
Soil or rock-like material	ASTM Standard D1452-69
Fly ash-like material	ASTM Standard D2234-76
Containerized liquid waste	“COLIWASA” described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA, or “Samplers and Sampling Procedures for Hazardous Waste Streams,” EPA

Frequency of Analyses

Re-characterization of established waste streams that are documented with a HWPS are re-verified on a yearly basis. This is intended to ensure that the characterization of each waste stream documented on a HWPS is accurate and up-to-date. Samples are taken and analyzed as necessary in performing this re-verification when new or unknown processes are encountered in the re-characterization process.

Verification testing begins after feedback has indicated that an off-site generator’s identification is inaccurate. This testing will begin on the next turn-in by this generator and will continue until the off-post generator’s identification has proved to be accurate. Sampling will be done in accordance with the sampling schedule found in **Table C-5** for containerized waste.

Table C-5. Containerized Waste - Number of Samples Collected Based on Lot Size

Lot Size	Number of Samples to be Collected
2 to 8	2
9 to 15	3
16 to 25	5
26 to 50	8
51 to 90	13
91 to 150	20

Additional requirements for Facilities Handling Ignitable Reactive or Incompatible Waste:

No additional testing of ignitable, reactive, or incompatible hazardous waste is necessary because DOD turn-in requirements for containerized waste (as stated above) provide the necessary information to properly store ignitable and reactive wastes and prevent the mixing of incompatible wastes.

Land Disposal Restriction

Additional requirements to meet land disposal restrictions:

Using information provided by the turn in activities described above, the DRMO will consider all accepted waste which contains substances banned from land disposal to exceed the treatment standards and will attach the proper notification to the manifest as specified in 40 CFR Section 268.7(a)(1).

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APPENDIX D COMPATIBILITY CHART

To be used for:



Corrosive Material Base
Corrosive Material Acid



Oxidizing Material &
Organic Peroxide Material
(Note the letter "O" is under the flame)



Compressed Gas
Cylinders



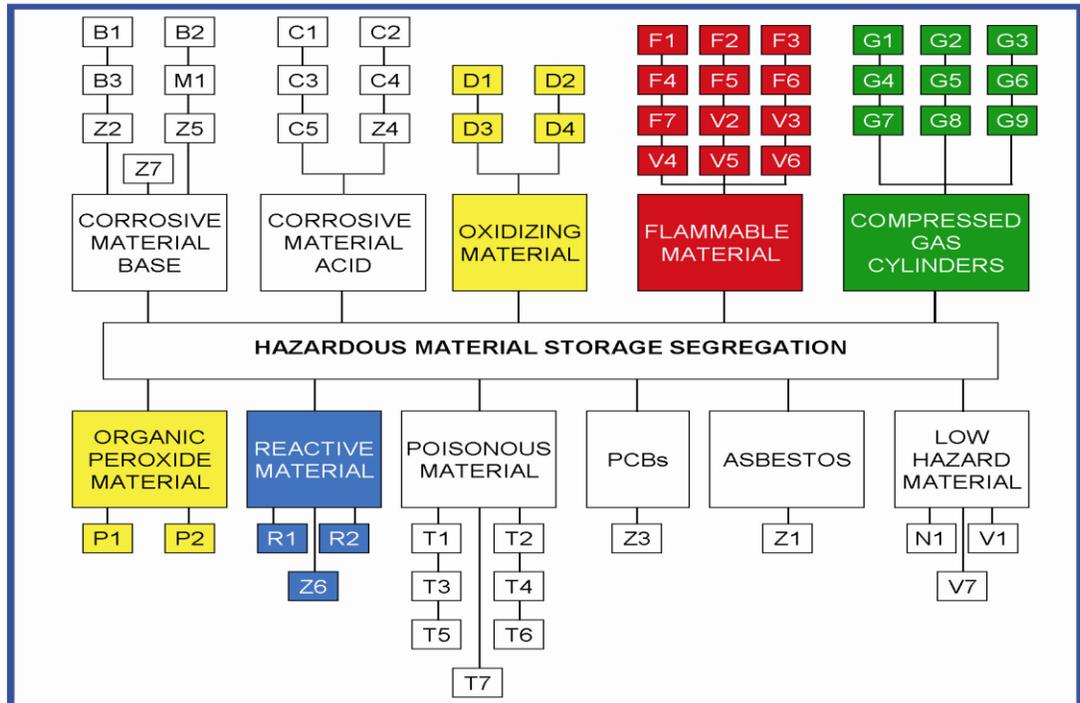
Flammable
Material



Reactive
Material



Poisonous
Materials



CORROSIVE MATERIAL – BASE

B1 Alkali, Corrosive, Inorganic
B2 Alkali, Corrosive, Organic
B3 Alkali, Low Risk
M1 Magnetized Material
Z2 Article Containing Mercury
Z5 Article Battery, NiCad, Nonspillable
Z7 Article, Battery, Dry Cell

CORROSIVE MATERIAL - ACID

C1 Acid, Corrosive, Inorganic
C2 Acid, Corrosive, Organic
C3 Acid, Low Risk
C4 Acid, Corrosive & Oxidizer, Inorganic
C5 Acid, Corrosive & Oxidizer, Organic
Z4 Article, Battery, Lead Acid, Nonspillable

OXIDIZING MATERIAL

D1 Oxidizer
D2 Oxidizer and Poison
D3 Oxidizer & Corrosive, Acidic
D4 Oxidizer & Corrosive, Alkali

FLAMMABLE MATERIAL

F1 Flammable Liquid, DOT PKG GP 1, OSHA IA
F2 Flammable Liquid, DOT PKG GP II, OSHA IB
F3 Flammable Liquid, DOT PKG GP III, OSHA IC
F4 Flammable Liquid, DOT PKG GP III, OSHA II
F5 Flammable Liquid and Poison
F6 Flammable Liquid & Corrosive, Acidic
F7 Flammable Liquid & Corrosive Alkali
V2 Aerosol, Nonflammable
V3 Aerosol, Flammable
V4 DOT Combustible Liquid, OSHA IIIA
V5 High Flash Point Material, OSHA IIIB
V6 Petroleum Products

Compressed Gas Cylinders

G1 Gas, Poison, Nonflammable
G2 Gas, Flammable
G3 Gas, Nonflammable
G4 Gas, Nonflammable, Oxidizer
G5 Gas, Nonflammable, Corrosive (Nonflammable)
G6 Gas, Poison, Corrosive (Nonflammable)
G7 Gas, Poison, Oxidizer (Nonflammable)
G8 Gas Poison, Flammable
G9 Gas, Corrosive, Oxidizer (Nonflammable)

ORGANIC PEROXIDE MATERIAL

P1 Peroxide, Organic, DOT Regulated
P2 Peroxide, Organic, Low Risk

PCBs

Z3 Article Containing PCB

ASBESTOS

Z1 Article Containing Asbestos

REACTIVE MATERIAL

R1 Reactive Chemical, Flammable
R2 Water Reactive Chemical
Z6 Article, Battery, Lithium

POISONOUS MATERIAL

T1 DOT Poison – Inhalation Hazard
T2 UN Poison, Pkg Gp I
T3 UN Poison, Pkg Gp II
T4 UN Poison, Pkg Gp III
T5 Pesticide, Low Risk
T6 Health Hazard
T7 Carcinogen (OSHA, NPT, IARC)

LOW HAZARD MATERIAL

(Case by case bases - Store based on applicable hazard(s))
N1 Not Regulated as Hazardous
V1 Misc Haz Materials Class 9
V7 Environmental Hazard

NOTE: Universal Waste is to be stored based on its hazard

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APPENDIX E
INSPECTION FORMS

Exhibit E-1
Environmental Compliance Inspection Checklist

3D INFANTRY DIVISION Marne Inspection Program Checklist		Date of Quarterly Inspection:		D-1	
Functional/Subordinate Area: Environmental Compliance (BN/CO)		Score:		Checklist Effective Date: 30 MAY 2014	
DPW- ENVIRONMENTAL COMPLIANCE (912) 767-3388		Unit: Bldg.#		ASSESSOR: PHONE#:	
REFERENCES: See individual checklist items.					
1. TASK: compliance with relevant installation, DA and DOD environmental protection regulations and policies					
2. CONDITION: In garrison and field environments					
3. STANDARD(S): 90-100 points= T = TRAINED, 70-89 points= P = NEEDS PRACTICE, 69 points & below= U = UNTRAINED					
ITEM		Y	N	ASSESSOR COMMENTS	Points
A. DOCUMENTATION (1 Pt. unless noted diff.)					
1.Does documentation exist, designating an Environmental Compliance Officer (ECO)/Environmental Compliance NCO (EC-NCO)? FS/HAAF HWMP Ch. 3.3/AR 200-1 pg. 14, 1-28					
2.Is documentation (certificate) on-hand to verify the ECO/EC-NCO training? FS/HAAF HWMP Ch. 15.4					
3.Does the ECO maintain records of personnel training? FS/HAAF HWMP Ch. 16.2/AR 200-1 pg. 54, 16-6					
4.Does the ECO maintain all local regulations? AR 200-1, Para 1-28/ FS/HAAF HWMP Ch. 3.5					
5.Does the ECO maintain weekly inspection records? FS/HAAF HWMP Ch. 3.5/AR 200-1 pg. 54, 16-1					
6.Does the unit have: a. An Environmental SOP? and does it: b. Cover Spill Response? FS/HAAF HWMP Chs. 2.5.2 & 18.2 (1Pt.Ea.)					
7.Does the ECO maintain a material list of hazardous chemicals (can be the same as Material Safety Data Sheet Book)? Are Material Safety Data sheets available to include: a. Being strategically located? b. An Index for identifying contents of the book? c. Tabs for ease of finding specific sheets? d. All material used by the unit? 29 CFR 1910.1200 (a) (1) (1Pt.Ea.)					
8.Are signs posted in key areas to alert personnel of Best Management Practices (BMP's) and responsibilities (Wash racks, fueling stations and fuel storage areas, spill response stations, hazardous waste collection areas and hazardous material storage areas)? SWP3 Section 4, Table 4.1, AR 200-1, 40 CFR 122.26					
9.Does the unit have a copy of "Fort Stewart and Hunter Army Airfield User's Spill Response Guide?" AR 200-1, para 1-28/FS/HAAF HWMP Ch. 3.5					
10.Does the unit have a copy of "Fort Stewart and Hunter Army Airfield Hazardous Waste Management Plan?" AR 200-1, para 1-28					

ITEM	Y	N	ASSESSOR COMMENTS	Points
11.Does the unit have a copy of SWP3/drainage inspection log, conducts inspection and record results: a.Storm Water Prevention Plan? b.Secondary drainage inspection log? c.Daily storm water checks being conducted and recorded? FS Master SWP3 Section 4.2.7 (1Pt.Ea.)				
B. ENVIRONMENTAL QUALITY CONTROL COMMITTEE (5Pt.)				
12.Did Unit/Activity send a designated representative to the last quarterly EQCC meeting? AR 200-1, pg 11, 1-23 (a,c) & pg 13, 1-26 (a,d)				
C. SPILL CONTAMINATION/PREVENTION (5 Pts. unless noted diff.)				
13.Are spill kits: a.Strategically located? b.Maintained? c.Labeled? FS/HAAF HWMP Ch. 18.7 (1Pt.Ea.)				
14.Is the flammable cabinet marked and labeled with a "Flammable-Keep Fire Away" label? OSHA 1910.106 (d)(3)(ii)				
15.Are hazardous pollutant spills reported IAW established procedures? FS/HAAF HWMP Ch. 18.2				
*16.Are Hazardous materials and wastes stored with adequate secondary containment? FS/HAAF HWMP Ch. 7.5				
17.Do fueling areas provide Adequate containment in case of spills or leaks (berms, diking or curbing)? FS Master SWP3 Section 4.0				
*18.Are wastes stored in authorized containers? FS/HAAF HWMP Chs. 7.1 & 7.2				
*19.Are wastes appropriately segregated? FS/HAAF HWMP Chs. 7.1 & 7.2				
20.Are only dry methods being used for spill cleanup? FS/HAAF HWMP Ch. 18.2.2				
21.Are drip pan/s: a.Present? and b.Used for capturing leaks from vehicles? FS Master SWP3 Section 4.0, Table 4.1 (1Pt.Ea.)				
22.Are above ground storage tanks being: a.Kept in good repair? b.Fill-ports free of trash? c.Show signs of corrosion...i.e compromised "interstitial space" FS Master SWP3 Section 4.2.1 (1Pt.Ea.)				
23.Are drums/containers used for storage in a serviceable condition? FS/HAAF HWMP Ch. 7.1.2				
24.Are drums/containers stored outdoors on pallets and covered to prevent storm water runoff? FS Master SWP3 Section 4.2				
*25.Are drum/container openings properly sealed or closed? FS/HAAF HWMP Ch. 7.1.2				
*26.Do creek or drainage channels show signs of pollutants? FS IDDE, MS4 4.1				
*27.Are small spills cleaned in a timely manner (within 30 minutes after the occurrence)? FS/HAAF HWMP Ch. 18.1				

ITEM	Y	N	ASSESSOR COMMENTS	Points
*28.Can Potentially Pollutant Materials (PPM) stored outdoors be moved indoors or covered to prevent contamination to storm water (used dry sweep, booms, etc.)? FS Master SWP3 Section 4.0				
*29.Are hazardous materials or wastes (POL's, whether in tanks, tankers or other storage containers) stored in the vicinity of storm drains? FS Master SWP3 4.3.2				
30.Is outdoor equipment maintenance minimized, and when necessary, are BMP's being utilized? FS Master SWP3 4.0				
31.Are gas cylinders stored properly: a.In an upright position? b.Secured by lashing, strapping, chaining or clamping? AR 700-68 & FS 420-11 (1Pt.Ea.)				
D. H/W HANDLING & DISPOSAL (5 Pts. unless noted diff.)				
*32.Are filled containers turned in to Hazardous Waste Handling Facility (Bldg.1157 FS, or Bldg 720 HAAF) within 72 Hours of being filled? FS/HAAF HWMP Ch. 7.4				
33.Are personnel handling and/or generating hazardous wastes trained IAW FS/HAAF HWMP? FS/HAAF HWMP Ch. 15.2.4/AR 200-1 pg. 46, 15-3				
34.Are lead acid batteries properly stored? FS/HAAF HWMP Ch. 9.7				
*35.Are waste dry batteries: a.Collected? b.Segregated? c.Stored? d.Disposed of properly? FS/HAAF HWMP Ch. 9.7 (1Pt.Ea.)				
36.Are empty POL containers: a.Drained? b.Triple-rinsed? c.Collected for turn-in? FS/HAAF HWMP Ch. 5.4 (1Pt.Ea.)				
*37.Are flammable containers (tankers, JP-8 drums, fuel filter drums, etc?), properly grounded? FS/HAAF HWMP Chs. 7.4, 8.5 & 9.15				
38.In the aftermath of small spills is used dry sweep and contaminated soil removed and turned in to Bldg. 1157 at FS and Bldg. 720 at HAAF? FS/HAAF HWMP Chs. 11.1 & 9.2				
39.Are waste aerosol cans stored and nozzles removed prior to placement into collection drums or in approved containers? FS/HAAF HWMP Ch. 9.1				
*40.Are flammable materials stored in a flammable cabinet? FS/HAAF HWMP Ch. 5.3				
*41.Are hazardous materials/wastes and or non-hazardous materials/wastes being put in dumpsters or other trash containers? FS ENV HB Ch. 2 pg. 15				
42.Does the unit use the "Used Material Manifest" form for turn-ins? FS/HAAF HWMP Ch. 11.3.2 (1Pt.)				
E. SIGNS AND LABELS (5 Pts. unless noted diff.)				
*43.Are all containers labeled for content? FS /HAAF HWMP Ch. 7.3				
44.Are waste storage areas identified with signs as Satellite Waste Accumulation or Used Product Point? FS/HAAF HWMP Ch. 7.4				

ITEM	Y	N	ASSESSOR COMMENTS	Points
45. Are "No Smoking" signs posted in designated areas? FS/HAAF HWMP Ch. 7.4 (1Pt.)				
46. Are emergency response phone numbers posted wherever hazardous materials or hazardous wastes are stored? FS/HAAF HWMP Ch. 7.4 (1Pt.)				
47. Are storm drains painted for proper identification (grates painted yellow or with a "fish" stenciled on them)? FS SWP3, NPDES 391-3-6-16 (1Pt.)				
F. WASHRACKS (1 Pt. unless noted diff.)				
48. Are wash racks, including safety grates and plumbing (faucets, valves, etc?) being: a. Properly maintained (service orders or IJO's requested if necessary?) b. Kept free of trash? FS/HAAF HWMP Ch. 9.33.1 (1Pt.Ea.)				
49. Is there a "Wash Rack Rules" sign posted in the immediate area? FS Master SWP3, Table 4.1				
50. Are washing operations adequately confined to the footprint of the wash rack to prevent storm water contamination? FS/HAAF HWMP Ch. 9.33.1				
51. Are wash rack pad drainage features being kept clear of accumulated sediment and trash? FS/HAAF HWMP Ch. 9.33.1				
52. Is the area surrounding the wash rack free of petroleum contaminated soil, sand, or silt? FS/HAAF HWMP Ch. 9.33.1				
53. Is the wash rack free of oil and/or fuel? FS Master SWP3 Section 4.0 Table 4.1				
54. Is unit ensuring that no soaps, solvents or emulsifiers are used with or without steam cleaning equipment? FS/HAAF HWMP Ch. 9.33.1 (5Pt.)				
G. NBC ROOMS				
*55. Are used protective mask filters (C-2 and C-2A1 canisters) properly: a. Segregated? b. Stored? c. Labeled? d. Disposed of as hazardous waste? FS/HAAF HWMP Ch. 9.20 (4Pt.)				
56. Are used alarm and NBC equipment batteries properly: a. Stored? b. Labeled? c. Disposed of as hazardous waste? FS/HAAF HWMP Ch. 9.7 (3Pt.)				
*57. Are used NBC detection and decon kits properly: a. Collected? b. Disposed of as hazardous waste? FS/HAAF HWMP Ch. 9.20 (2Pt.)				
H. ARMS ROOM				
*58. Are used rags, swabs, solvents and cleaning solutions properly: a. Collected? b. Stored? c. Disposed of as hazardous waste? FS/HAAF HWMP Ch. 9.27 (3Pt.)				

ITEM	Y	N	ASSESSOR COMMENTS	Points
59. Are used Night Vision device batteries properly: a. Collected? b. Stored? c. Disposed of as hazardous waste? FS/HAAF HWMP Ch. 9.7 (3Pt.)				
I. COMMUNICATIONS SHOP				
*60. Are used lithium, mercury, magnesium, and NiCad batteries properly: a. Discharged (when appropriate)? b. Segregated? c. Stored? d. Disposed of as hazardous waste? FS/HAAF HWMP Ch. 9.7 (4Pt.)				
J. CLARUS PARTS WASHERS (5 Pts. unless noted diff.)				
*61. Is the Clarus machine's lid closed when not in-use? FS Title V Permit, Condition 8.23.1				
62. Is the fluid pressure > 40 psi? Operators manual, page 10, para VII, sub para C. (1Pt.)				
K. BIO-CIRCLE MACHINE (1Pt.)				
63. Is Bio-Circle unit in the "ON" position? Operators manual, page 9, para 5.				
64. Is there any foul odor smell coming from solution? Operators manual, page 13, (Solution Odor).				
L. MISCELLANEOUS				
65. Misc.				

COMMENTS: _____

ASSESSOR SIGNATURE

ECO/ECNCO SIGNATURE

ASSESSOR PRINTED NAME / TIME

ECO/ECNCO PRINTED NAME

Craig Christopher
 RCRA Compliance Chief

* IAW IG directives the checklist items identified with a (*) symbol in the left margin of the item's text box are designated critical tasks. Critical tasks are those, which are absolutely necessary for successful compliance with relevant environmental protection regulations. Failure of any single critical task part of a quarterly or an MIP inspection will require a subsequent re-inspection of that checklist item/s in 14 calendar days of the conclusion of a quarterly or of an MIP inspection.

Failure of a re-inspection will generate a memorandum for record to the chain of command detailing the areas failed.

Exhibit E-2
FS/HAAF Daily/Monthly Stormwater Inspection Checklist

FORT STEWART/HUNTER ARMY AIRFIELD DAILY/MONTHLY STORM WATER INSPECTION CHECKLIST		CHECK MARK = SATISFACTORY X = SATISFACTORY					
CHECKED DAILY:	WK 1	WK 2	WK 3	WK 4	WK 5	MONTH OF: _____	ECO SIGNATURE _____
1. Inspect all liquid storage tanks, drums & containers for signs of corrosion and leakage. (Items stored indoors)							
NOTES:							
2. Inspect all liquid storage tanks, drums & containers for supports, valves and fill ports ensuring properly capped, sealed and/or in good working order.							
NOTES:							
3. Inspect spill kits for proper placement and for containing adequate materials needed for spill response. Fill if needed.							
NOTES:							
4. Inspect the area to ensure that POLs stored outside are covered & contained (especially batteries) and are not stored in vicinity of storm drains or conveyance systems.							
NOTES:							
5. Inspect areas to ensure drip pans have been emptied, are not exposed to rain events and for conditions (cracks, splits, holes or damage) replace if needed.							
NOTES:							
6. Inspection condition of marked storm drains (painted yellow or fish stencil).							
NOTES:							
7. Inspect ASTs Housekeeping pads for any POL sheen and remove any POLs, prior to release to an stormwater.							
NOTES:							
8. Inspect Oil Water Separators (if applicable), Oil & Grease Traps for heavy amounts of POLs in catch basin.							
NOTES:							
9. Inspect the area to insure all spills, regardless of quantity, are promptly handled according to Fort Stewart/HAAF Emergency Spill Response and Prevention Plan.							
NOTES:							

Exhibit E-3
90-Day Storage Area Inspection Checklist

90 DAY STORAGE INSPECTION CHECKLIST			
		YES	NO
1	Are areas in good condition (not leaking)?		
2	Is waste compatible with containers?		
3	Are containers kept closed (funnels and vent caps on)?		
4	Are containers managed to prevent rupture/leaks?		
5	Are waste residues removed prior to reuse of container?		
6	Is segregation of incompatible wastes, new waste materials and drums accomplished?		
7	Is the storage area properly signed (No Smoking, Spill Actions)?		
8	Are drums used for waste accumulation off the ground?		
9	Is the area free of recent spills and ground contamination?		
10	Are the drums placed on secondary containment?		
11	Are drums properly labeled to indicate contents?		
12	Is the accumulation start date on the drums less than 90 days?		
13	Are fire extinguishers located at the site?		
14	Are the tank berms free of spills, sheens or rainwater?		
15	Is spill response equipment and supplies located at the site?		
Deficiencies Noted:			
Corrective Action:			
Remarks:			
Date of Inspection:			
Inspectors Signature:			

Exhibit E-4
Facility Inspection Log

INSPECTION LOG						
DATE/TIME:	AREA/BLDG:	INSPECTOR SIGNATURE :			UN-NA	FREQUENCY
ITEM SAFETY AND EMERGENCY EQUIPMENT	TYPE OF PROBLEM	SAT	UN- SAT	LOCATION & PROBLEMS OBSERVED	DATE & NATURE OF CORRECTIVE ACTIONS	FREQUENCY
FACE SHIELD & CHEMICAL GOGGLES	BROKEN, DIRTY OR MISSING					WEEKLY
PROTECTIVE CLOTHING	HOLES, WORN, MISSING					WEEKLY
ABSORBENTS [E.G.SORB-ALL, VERMICULITE]	SATURATED, CONTAMINATED, BELOW MINIMUM QUANTITY					WEEKLY
EMPTY DRUMS / CONTAINERS	CORROSION, STRUCTURAL DAMAGE, SECURELY STORED					WEEKLY
EMERGENCY EYE WASH/SHOWER	WATER PRESSURE, LEAKING, FLUSHED					WEEKLY
VENTILATION SYSTEMS	NOT OPERATING, BLOCKED					WEEKLY
SHOVEL NON-SPARKING	MISSING, DAMAGED					WEEKLY
FIRE EXTINGUISHERS	NOT CHARGED, NOT MOUNTED, MISSING					MONTHLY
FIRE ALARM SYSTEM	NOT OPERATING					MONTHLY
TELEPHONE SYSTEM	NOT OPERATING					MONTHLY
FIRST-AID EQUIPMENT & SUPPLIES	ITEMS OUT OF STOCK, OUTDATED, EXPIRED SUPPLIES					MONTHLY
NON-SPARKING LUG WRENCH	MISSING, DAMAGED					WEEKLY
PUSH BROOM	MISSING, DAMAGED					WEEKLY
SECURITY						
WARNING SIGNS	ILLEGIBLE, MISSING					WEEKLY
SECURITY LIGHTS	NOT OPERATING					WEEKLY
BUILDING DOORS & LOCKS, FENCE & GATES	LOCKS MISSING, UNLOCKED, SIGNS OF TAMPERING					WEEKLY*

INSPECTION LOG (CONTINUED)						
ITEM	TYPE OF PROBLEM	SAT	UN-SAT	LOCATION & PROBLEMS OBSERVED	DATE & NATURE OF CORRECTIVE ACTIONS	FREQUENCY
BUILDING LOAD/UNLOAD AREA						
GENERAL DEBRIS & REFUSE	ORDERLINESS, OBSTRUCTION, GENERAL HOUSEKEEPING					WEEKLY*
ODOR, FUMES	DETECTIBLE BY SMELL, EYE OR NOSE IRRITATION					WEEKLY*
BASES OR FOUNDATION, CONTAINMENT TRENCHES, RAMPS OR ROOF WALLS	WET SPOTS FROM CONTAINERS, EVIDENCE OF LEAKING					WEEKLY*
BATTERY CHARGING AREA	STRUCTURAL INTEGRITY, E.G. EROSION, UNEVEN SETTLEMENT, CRACKS, ETC. WELL VENTILATED, IDENTIFIED & LOCATED OUTSIDE FLAMMABLE STORAGE AREA					MONTHLY
CONTAINER STORAGE AREA						
CONTAINERS	CORROSION, STRUCTURAL DEFECTS, SERIOUS DENTS					WEEKLY*
SEALING OF CONTAINERS	OPEN LIDS & LEAKING CONTENTS					WEEKLY
LABELING OF CONTAINERS	IMPROPER IDENTIFICATION, DATE OR MISSING; NOT INTACT; NOT READABLE					WEEKLY
HOUSEKEEPING	ABSTENTIONS & OBSTRUCTIONS					WEEKLY*
CONTAINMENT AREA COATING SEALANT	CRACKS, WORN SPOTS & PRESENCE OF ACCUMULATED LIQUIDS					WEEKLY*
LOAD / UNLOAD AREA AND VALVES	LEAKS ,SPOTS INDICATING SPILLS					WEEKLY*
CONTAINER PLACEMENT & STACKING	INSUFFICIENT ISLE SPACE, HEIGHTS OF STACKS EXCESSIVE					WEEKLY
SEGREGATION OF INCOMPATIBLE WASTE	INCOMPATIBLE WASTES IN SAME AREA, IMPROPER DIST. BETWEEN BARRIERS					WEEKLY
PALLETS	DAMAGED [E.G. BROKEN WOOD, WARPING, NAILS MISSING]					WEEKLY
CONTAINMENT SYSTEM COATING SEALANT	PRESENT, CRACKS, WORN SPOTS, PRESENCE OF LIQUIDS					WEEKLY*
IDENTIFICATION OF STORAGE AREAS	SIGNS POSTED [E.G. FLAMMABLE, ACID, TOXIC]					WEEKLY*
LIGHTING	BULBS MISSING, BURNED OUT, BROKEN FIXTURE					WEEKLY*
*DAILY WHEN IN USE						

Exhibit E-5
Secondary Containment Checklist

SECONDARY CONTAINMENT CHECKLIST

DATE:

INSPECTOR:

LOCATION: HAAF HAZARDOUS WASTE FACILITY

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
1. Check dike or berm system for the following:	_____	_____	_____
a. Level of precipitation in dike / available capacity:	_____	_____	_____
b. Operational status of drainage valves:	_____	_____	_____
c. Dike or berm permeability:	_____	_____	_____
d. Debris:	_____	_____	_____
e. Erosion:	_____	_____	_____
f. Permeability of earthen floor of diked area:	_____	_____	_____
g. Location/ status of pipes, inlets, drainage beneath tanks, etc.	_____	_____	_____
2. Check secondary containment for:	_____	_____	_____
a. Cracks:	_____	_____	_____
b. Discoloration:	_____	_____	_____
c. Presence of stored material (standing liquid):	_____	_____	_____
d. Corrosion:	_____	_____	_____
e. Valves conditions and locks:	_____	_____	_____
3. Check retention and drainage ponds for:	_____	_____	_____
a. Erosion:	_____	_____	_____
b. Availability capacity:	_____	_____	_____
c. Presence of spilled or leaked material:	_____	_____	_____
d. Debris:	_____	_____	_____
e. Stressed vegetation:	_____	_____	_____

Exhibit E-6
Tank Inspection Checklist

TANK INSPECTION CHECKLIST

DATE: _____

INSPECTOR: _____

TANK: # 1-5

LOCATION: HAAF HAZARDOUS-WASTE FACILITY

TANK CONTENTS: JP-8, USED OIL & ANTIFREEZE

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
1. Check tanks for leaks, specifically looking for:			_____
a. Drip marks:			_____
b. Discoloration of tanks:			_____
c. Puddles containing spilled or leaked material			_____
d. Corrosion:			_____
e. Cracks:			_____
f. Localized dead vegetation:			_____
2. Check foundation for:			_____
a. Cracks			_____
b. Discoloration:			_____
c. Puddles containing spilled or leaked material			_____
d. Settling:			_____
e. Gaps between tanks and foundation:			_____
f. Damage caused by vegetation roots:			_____
3. Check piping for:			
a. Droplets of stored material:			_____
b. Discoloration:			_____
c. Corrosion:			_____
d. Bowing of pipe between supports:			_____
e. Evidence of stored material seepage from valves or seals:			_____
f. Localized dead vegetation:			_____

Exhibit E-7
Defense Fuel Supply Point, HAAF
Fuel Disposition Form

Defense Fuel Supply Point, HAAF

Fuel Disposition Form

All fuel vehicles returning products to Bulk fuel facilities must have a DA Form 2077 (Filter Effectiveness Test). Fuel will not be accepted without it.

Some off specification products rejected for return to Bulk can be accepted if **Corrective** measures are taken. Carefully draining all Sumps and proper recirculation can correct a majority of discrepancies. **Please see note this form provided by Bulk Fuel System Operator.**

The Fuel on this vehicle has been rejected for the following reasons.

Correctable Discrepancies

___ Current DA 2077 Not Available

___ Free Water

___ Cloudy (Entrained Water)

___ Sediment

___ Microbiological Growth

___ Other

Non Correctable Discrepancies

___ Blended Products

___ Stained/Off Color

___ Contaminated with Non - Fuel Product

___ Not JP-8

___ Contains +100 Additive

___ Other

Notes: _____

Unit: _____ **Vehicle Number:** _____ **Quantity Rejected:** _____

DA Form 2077 Lab Report Number: _____

Bulk System Operator

Signature: _____ **Date:** _____

To turn in as waste, form must be signed by a E-7 or Higher.

Signature: _____ **Rank:** _____ **Date:** _____

APPENDIX F DOD and GOVERNMENT TRAINING RESOURCES

Agency	Program Areas/Courses	Contact Information
Army Logistics Management College (ALMC) Fort Lee, Virginia	-Army Installation environmental training -Basic Environmental Staff Course -Executive Environmental Overview Course -NEPA Implementation Course -Defense HM/HW Handling Course -Defense HW Refresher Course -DoD HM Manifest Course	http://www.almc.army.mil/ (804)765-4806 DSN 539-4806
Corps of Engineers Professional Development Support Center (PDSC) Huntsville, AL	-Proponent Sponsored Engineer Corps Training (PROSPECT) Program -Scientific/technical training civil and military support missions -Historic building preservation and maintenance -Wetlands regulations -Environmental impact assessments	http://pdsc.usace.army.mil/ (256)895-7421/7425 DSN 760-7421/7425
US Army Engineer School (USAES) Fort Leonard Wood, MO	-Training support packages -Environmental awareness correspondence courses for soldiers	http://www.wood.army.mil/
US Army School of Military Packaging Technology Aberdeen Proving Ground, MD	-Defense Packaging of Hazardous Materials for Transport-initial and refresher courses	http://smpt.apg.army.mil/ (410)278-2008 DSN 298-2008
US Army Center for Health Promotion and Preventive Medicine Aberdeen Proving Ground, MD	-Transport of Biomedical Material Course -Risk Communication Course -Waste Management Workshops	http://chppm-www.apgea.army.mil/ (800)222-9698

Agency	Program Areas/Courses	Contact Information
US Army Academy of Health Sciences, Department of Preventive Health Services Fort Sam Houston, TX	-DoD Pesticide Applicators Certification Course	http://www.cs.amedd.army.mil/ (210)221-6750 DSN 471-6750
Air Force Institute of Technology (AFIT) Dayton, OH	-Satellite training seminars -Environmental engineering courses -HW management -Unit level environmental officer courses	http://www.afit.edu (937)255-6565 DSN 785-6565
Air Force 345 th Training Squadron, Transportation Training Flight Lackland AFB, TX	-Hazardous Materials Preparer Course	http://www.lackland.af.mil/ (210) 671-4917 DSN 473-4917
Navy Civil Engineer Corps Officer's School (CECOS) Port Hueneme, CA	-Environmental compliance courses -Environmental management -P2 -Environmental conservation -Energy management	https://www.netc.navy.mil/centers/csfe/cecos/index.cfm (805)982-6524 DSN 551-6524
Naval Safety and Environmental Training Center Norfolk, VA	-Asbestos management courses	http://www.safetycenter.navy.mil/TRAINING/default.htm (757)445-8778 DSN 565-8778
Defense Logistics Agency (DLA) Training Center Columbus, OH	-Hazardous materials management courses -Hazardous materials transport courses -Environmental protection courses -Ozone depletion prevention courses	http://www.hr.dla.mil/ (800)458-7903 DSN 850-6857

APPENDIX G TECHNICAL ASSISTANCE

The FS/HAAF IEC (DPW Environmental Office) is the primary technical contact for environmental training questions and all other questions pertaining to this plan. Pertinent IEC contacts regarding Hazardous Material and Hazardous Waste Management are listed in the table below. Regulatory agencies and organizations providing assistance are listed on the following pages.

FS/HAAF IEC (DPW Environmental Office)

Directorate of Public Works
ATTN: Environmental Branch
1550 Frank Cochran Drive
Fort Stewart, Georgia 31314-49270
(912) 767-2010

IEC (DPW Environmental Office) Technical Contacts.

Job Title	Name	Phone Number
Chief Environmental Division	Mr. Thomas Fry	(912) 767-4584
Environmental Compliance/P2 Chief	Ms. Tressa Rutland	(912) 767-7919
RCRA Compliance Manager	Mr. Craig Christopher	(912) 767-1234
RCRA Compliance Environmental Protection Specialist	Mr. Gregory Benn	(912) 767-1228
RCRA Compliance Project Manager	Mr. Andy Rodriguez	(912) 767-8012
FS HWSA	Mr. Stan Kane	(912) 767-4634
HAAF 90-Day HWSA	Mr. Ron Gilcott	(912) 315-6287
MEDDAC Environmental Science Office or Chief of Environmental Services Division	CPT Elizabeth Barnhart Mr. John Boyd	(912) 435-6074 (912) 435-6989
FS Landfill Operator	Mr. David Turner	767-3947
Fish and Wildlife Branch	Mr. Tim Beaty	(912) 767-2584

EPA Headquarters

Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
(202)272-0167
<http://www.epa.gov/>

EPA Region 4

Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8960
(404)562-9900
<http://www.epa.gov/region4/>

Georgia Environmental Protection Division

Hazardous Waste Management Branch
2 Martin Luther King Jr. Drive
Suite 1154 East Tower
Atlanta, GA 30334
(404)656-7802
<http://www.gaepd.org/>

United States Army Center for Health Promotion & Preventive Medicine (USACHPPM)

5158 Blackhawk Road
Aberdeen Proving Ground, MD 21010-5403
(800)222-9698
(410) 436-xxxx
DSN 584-xxxx
<http://chppm-www.apgea.army.mil/>

Air Quality Surveillance Program	x-3500
Groundwater and Solid Waste Program	x-2024
Entomology Program	x-3613
Surface Water and Wastewater Program	x-3816
Water Supply Program.....	x-3919

United States Army Environmental Command (USAEC)

5179 Hoadley Road
Aberdeen Proving Ground, MD 21010-5401
(410)436-2657
DSN 584-xxxx

<http://aec.army.mil/>

Cleanup Division	x-3618
Environmental Quality Division.....	x-4714
Information and Environmental Reporting Division	x-1650
Training Support Division	x-7526

United States Army Installation Management Command - SE (IMCOM-SE)

ATTN: IMSE-ZB
1593 Hardee Avenue, SW
Fort McPherson, GA 30330-1057
(404)464-0756
DSN 367-xxxx

<http://www.imcom.army.mil/southeast/sites/local/>

Environmental Branch	x-0773
Air Quality/EPCRA-TRI	x-0778
Water Programs	x-0710
Solid Waste/HAZMAT/Recycling.....	x-0708
Conservation/Restoration.....	x-0713
EPR/Budget/ENFs	x-0712
Natural Resources	x-4090

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APPENDIX H GLOSSARY

AAFES	Army & Air Force Exchange Service
ACP	Area Contingency Plan
AR	Army Regulation
AST	Above Ground Storage Tank
BMP	Best Management Practice
BSL	Biosafety Level
C°	Degrees Celsius
CDC	Centers for Disease Control
CDL	Commercial Drivers' License
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CH	Chapter
DA	Department of the Army
DLA	Defense Logistics Agency
DOD	Department of Defense
DOT	U.S. Department of Transportation
DPW	Directorate of Public Works
DRMO	Defense Reutilization and Marketing Office
DRMS	Defense Reutilization and Marketing Service
ECO	Environmental Compliance Officer
ECNCO	Environmental Compliance Non-Compliance Officer
ECS	Expeditionary Combat Support
EMS	Environmental Management System
EO	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
EQCC	Environmental Quality Control Committee
F°	Degrees Fahrenheit
GAEPD	Georgia Department of Natural Resources Environmental Protection Division
HAZCOM	Hazard Communication Standard
HM	Hazardous Material
HAZMAT (DOT shipping description)	Hazardous Material
HAZMART	Hazardous Materials Pharmacy
hrs	Hours
HSWA	Hazardous and Solid Waste Amendments
HW	Hazardous Waste
HWMP	Hazardous Waste Management Plan
HWPS	Hazardous Waste Profile Sheet
HWSA	Hazardous Waste Storage Area
IAW	In Accordance With
IC	Incident Commander

ICO.....	Infection Control Officer
IEC.....	Installation Environmental Coordinator
ISCP.....	Installation Spill Control Plan
kg.....	Kilogram
ID.....	Identification
lb.....	Pound
LDR.....	Land Disposal Restriction Form
LQG.....	Large Quantity Generator
MEDCOM.....	Medical Command
m/L.....	Milligram per Liter
MOGAS.....	Motor Gasoline
SDS.....	Safety Data Sheet
NCP.....	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA.....	National Environmental Policy Act
NiCad.....	Nickel Cadmium
NRC.....	National Response Center
OSC.....	On-Scene Commander
OSHA.....	Occupational Safety and Health Administration
OSH Act.....	Occupational Safety and Health Act
P2.....	Pollution Prevention
PAM.....	Pamphlet
POL.....	Petroleum, Oil, Lubricant
PPE.....	Personal Protective Equipment
qt.....	Quart
RCRA.....	Resource Conservation and Recovery Act
RSC.....	Regional Support Command
RMW.....	Regulated Medical Waste
RQ.....	Reportable Quantity
SARA.....	Superfund Amendments and Reauthorization Act
SMS.....	Sustainability Management System
SOP.....	Standard Operating Procedure
SPCCP.....	Spill Prevention, Control, and Countermeasure Plan
SP&R.....	Spill Prevention and Response Plan
SQG.....	Small Quantity Generator
SW.....	Solid Waste
TB.....	Technical Bulletin
TCLP.....	Toxicity Characteristic Leaching Procedure
TM.....	Technical Manual
TRI.....	Toxic Release Inventory
TSC.....	Training Support Center
TSCA.....	Toxic Substances Control Act
UN.....	United Nations
USC.....	United States Code
UST.....	Underground Storage Tank
yrs.....	Years

Appendix I REFERENCES

29 CFR 1910, Occupational Safety and Health Standards

40 CFR 112, Oil Pollution Prevention

40 CFR 260-273, and 279, Resource Conservation and Recovery Act of 1976 and subsequent amendments

49 CFR 100-185, Pipeline and Hazardous Materials Safety Administration, Department of Transportation

AR 40-5, Preventive Medicine

AR 200-1, Environmental Protection and Enhancement

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Comprehensive Environmental Response, Compensation, and Liability Act of 1980

DA PAM 200-1, Environmental Protection and Enhancement

DOD Directive 4140.1, Materiel Management Policy

DOD 4160.21-M, Defense Material Disposition Manual

DOD 4500.9-R, Defense Transportation Regulation, Part II Cargo Movement, Chapter 204

DOD Instruction 4715.6, Environmental Compliance

Emergency Planning and Community Right-to-Know Act of 1986

Executive Order 13423, “Strengthening Federal Environmental, Energy and Transportation Management,” January 2007

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Fort Stewart Regulation 700-4, Logistics Ammunition Turn-in of Brass and Residue

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FS/HAAF Oil and Hazardous Substance Spill Prevention and Response Plan, March 2005

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National Environmental Policy Act of 1969

Pollution Prevention Act of 1990

TB-43-0134, Battery Disposition and Disposal

Toxic Substances Control Act of 1976

TM-38-410, Storage and Handling of Hazardous Materials

U.S. Army Medical Command Regulation 40-35, Management of Regulated Medical Waste