FORT GEORGE G. MEADE, MARYLAND

HAZARDOUS WASTE MANAGEMENT PLAN

Prepared for:
Fort George G. Meade
Directorate of Public Works
Environmental Division

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Prepared by:

Environmental Research Group (ERG), L.L.C.
6049 Falls Road
Baltimore, Maryland 21209
410-366-5176

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Acronyms and Abbreviations

AR	Army Regulation
CFR	Code of Federal Regulations
CHSSF	Controlled Hazardous Substance Storage Facility
COMAR	Code of Maryland Regulations
DLA	Defense Logistics Agency
DOD	Department of Defense
DPW	Directorate of Public Works
DRMS	Defense Reutilization and Marketing Service
EO	Environmental Officer
EPA	United States Environmental Protection Agency
ERG	Environmental Research Group, LLC
ETID	Electronic Turn In Document
FMMD	Fort George G. Meade
HCC	Hazardous Characteristic Codes
HM	hazardous material
HW	hazardous waste
HWMP	Hazardous Waste Management Plan
HWSA	Hazardous and Solid Waste Amendments
HQ	Headquarters
IAW	in accordance with
IMCOM	Army Installation Management Command
IOSC	Incident On-Scene Commander
IRT	Initial Response Team
MDE	Maryland Department of the Environment
PCB	polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
RMW	regulated medical waste
SAA	Satellite Accumulation Area
SDS	Safety Data Sheet
U.S.	United States
USDOT	United States Department of Transportation
UW	universal waste

1. INTRODUCTION

This chapter outlines the purpose and requirements of the Fort George G. Meade (FMMD) Hazardous Waste Management Plan (HWMP). The HWMP prescribes responsibilities, policies, and procedures for managing hazardous materials and wastes at FMMD as required by Army Regulation (AR) 200-1*, Environmental Protection and Enhancement*. This Plan is written to ensure FMMD's compliance with applicable federal, state, and local laws and regulations.

1.1 Purpose and Requirement

The Environmental Division manages and oversees the hazardous waste program for all organizations located on FMMD. The HWMP is a document developed for FMMD and provides guidance to all personnel who work with hazardous waste (HW) and universal waste (UW).

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 and prevent damage to the environment. This Plan incorporates regulatory HW requirements by the United States (U.S.) Environmental Protection Agency (EPA), United States Department of Transportation (USDOT), Maryland Department of the Environmental (MDE), Department of Defense (DOD), Army, and local regulations. The Defense Logistics Agency (DLA) will be used as the HW disposal agent. Therefore, the plan incorporates the HW turn-in requirements of DOD, Defense Materiel Disposition Manual.

The HWMP applies to all units/activities/tenants located on FMMD. All military, civilian, and contract personnel working at FMMD properties are subject to the policies outlined in this HWMP.

This Plan will be kept current to reflect changes in regulatory requirements or waste generating activities at FMMD. At a minimum, this Plan will be reviewed annually and updated as needed. Document the reviews and updates on Table 1.1

All Environmental Officers (EO), as well as any other Fort Meade personnel directly involved in HM or HW management, are encouraged to provide comments and input to this Plan.

Table 1.1 - Record of Updates

The HWMP is updated for administrative changes or as changes to waste generation and management practices occur, including those driven by changes in applicable regulations. The review should record the date, nature of change, and the name of the reviewer.

Record of Updates Change No.	Date of Change	Nature of Change	Reviewer
1	November 2023	Administrative updates. Updates and additions to the Annexes, including the Waste User Guides.	Dan Bryan, Fort Meade Hazardous Waste Manager

1.2 Regulations

This Section provides an overview of the applicable Federal, State, and Army regulations which govern the management of HW at FMMD.

United States Environmental Protection Agency

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

- Part 260 through Part 272 for the regulation of HW
- Part 273 for the regulation of UW
- Part 279 for the regulation of used oil
- Defense Transportation Regulations which incorporate by reference 49 CFR Parts 170 through 177 regarding hazardous materials transportation

United States Occupational Safety and Health Administration

FMMD must manage its waste IAW Occupational Safety and Health Standards. This Plan provides procedures for complying with the following parts of 29 CFR:

- Part 1910 regarding employee safety

Maryland Department of the Environment (MDE)
FMMD must manage its waste IAW the Code of Maryland Regulations (COMAR). This Plan provides procedures for complying with COMAR, Chapter 26.13.03 for Standards Applicable to Generators of HW.

On May 3, 2021, major revisions to Maryland's regulations for generators of hazardous waste became effective. This action incorporated into the COMAR changes made at the federal level by the U.S. Environmental Protection Agency (EPA) in its Hazardous Waste Generator Improvements Rule (81 Federal Register 85732, Nov. 28, 2016). The current regulations may be viewed using the COMAR Online feature on the website of the Maryland Division of State Documents. dsd.state.md.us

COMAR 26.13 establishes enforceable requirements, and persons should refer to the regulatory text to identify the specific requirements with which they must comply.

More information can be found at MDE's "Summary and Overview Revisions to Maryland's Hazardous Waste Generator Regulations Revisions Effective May 3, 2021."

Army Regulation 200-1
FMMD personnel must comply with AR 200-1, *Environmental Protection and Enhancement*, which contains Army policy for hazardous material and waste management. This Plan provides procedures for complying with these regulations.

The following Army policies have been stipulated in AR 200-1, Chapter 10 Waste Management:

- 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 asbestos, chemical and biological agent waste; radioactive waste; and regulated medical wastes (RMW).
- 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 Headquarters (HQ), Army Installation Management Command (IMCOM).
- Hazardous wastes generated on FMMD that fall under service, facility, maintenance, or construction project contracts should be funded as part of the original contract.

- The Garrison Environmental Division will be considered the generator, for funding purposes, of orphan wastes found on post, and wastes from a household hazardous waste collection program.

2. RESPONSIBILITIES

To meet Federal, State, and Army requirements, supervisors and commanders at FMMD 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 list of specific responsibilities related to HW management.

FMMD Directorate of Public Works (DPW) – Environmental Division

- Coordinate, inspect, or manage all aspects of installation actions relative to environmental regulations, including activities of tenants and sub-installations, and recommend to the Installation Commander necessary or advisable changes in policies to improve program management.
- Ensures environmental regulations are adhered to through all phases of installation construction support.
- Advise the Commander of issues that could place FMMD in non-compliance with HW regulatory requirements.
- Provide technical assistance and guidance to hazardous waste generating activities, tenants, and operators of RCRA hazardous waste treatment, storage, and disposal units.
- Ensure hazardous wastes are properly identified, segregated, and weighed pursuant to Federal, State, and Army requirements prior to release for transportation or disposal.
- Coordinate the analysis of waste to determine if it is hazardous and provide copies of waste analysis prior to release for off-post transportation or release to the Defense Logistics Agency (DLA) Disposition Services.
- Establish, monitor, and execute programs in waste management, including waste minimization, resource recovery, reutilization, and recycling.
- If delegated by the Garrison Commander, can have signature authority to sign certain HW documents per COMAR 26.13.03.04 and 40 CFR §270.11(b).
- Review, approve, and certify the biennial HW generation report for FMMD.

Hazardous Waste Program Manager

- Manage program requirements including funding, tracking, completing required reports, and other relevant tasks.
- Manages the day-to-day operations at the Controlled Hazardous Substance Storage Facility (CHSSF), including container management and inspections.
- Sign hazardous waste manifests, land disposal restriction forms, and any additional paperwork required for disposal of HW.

- Ensure that HW prepared for transportation off site is placed in appropriate United Nations specification, performance-oriented packaging; and sign all required HW turn-in/processing documentation.
- Provide each HW generating unit/activity on FMMD a copy of this Plan. The HWMP is available on the FMMD home page for all units to access and download. https://home.army.mil/meade/index.php/my-fort/all-services/environmental/compliance/hazardous-waste
- Assist FMMD personnel in the process of identifying unknown waste to determine if it is hazardous.
- Prepare and submit the biennial HW generation report for FMMD.

Hazardous Waste Generating Activities/Units

- Appoint an EO. The EO should have a minimum of 12 months retention within the unit. In the case of contract operations, the Environmental Health and Safety person is the preferred EO.
- Appoint the EO to serve as the Satellite Accumulation Area (SAA) Manager to ensure operational compliance, who will attend required FMMD training.
- Ensure all HW, non-HW, UW, and SAAs are managed and disposed of in accordance with this Plan.
- Conduct periodic visual inspections of SAA and waste collection areas. Notify the Hazardous Waste Program Manager of any deficiencies and report HW releases immediately.
- Coordinate waste turn-ins through the Hazardous Waste Program Manager.
- As a HW generating activity, tenants are responsible to pay FMMD for the disposal of their hazardous waste.
- EO do not sign HW manifests, unless specifically trained and appointed in writing by FMMD to sign manifests.

Environmental Officer

The duties and responsibilities of EOs are widespread and should not be taken lightly.

- Maintaining a safe work area and facility.
- Complying with Pollution Prevention, Sustainability, Recycling and Net Zero Programs and recommending improvements.
- Managing Solid Waste, Hazardous Material, Hazardous Waste and Used POL.
- Training Unit Personnel on environmental issues.
- Managing environmental inspection reporting and record keeping programs.
- Preserving Fort Meade training lands, endangered species, cultural resources and wetlands.
- Advising the Commander of any Environmental Problems and Legalities.

Building Managers

- Manage universal waste, including fluorescent lamps and batteries, in accordance with FMMD guidance and the HWMP.

- Report any episodic hazardous waste generation to the Hazardous Waste Program Manager on the day the waste was generated.

Defense Logistics Agency (DLA) Disposition Services

- Act as the FMMD HW disposal agency.
- Ensure that all safety precautions are taken, and EPA and MDE inspection records are accomplished for HM/HW for which DLA Disposition Services has accountability.
- Provide a HW disposal service to FMMD through a waste disposal contract.
- Oversee and initiate contracts for HW disposal in accordance with DOD 4160.21-M and DLA Environmental Protection Manual DLAM 6050.1 and ensure compliance with all Federal and State regulations. Provide estimated disposal costs for each HW stream.
- Provide guidance on preparation of DD Form 1348-1A, Issue Release/Receipt Document, and perform visits to ensure that documentation is complete and accurate, and that waste is properly prepared for transport.
- Ensure disposal contractors comply with EPA land disposal restrictions based on information supplied on the HW profile sheet and commercial manifest.
- Maintain HW manifests for a minimum of three (3) years.

FMMD Fire Department

- Ensure 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.

3. HAZARDOUS WASTE GENERATOR STATUS

3.1 Generator Status Defined

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 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.

FMMD is a Large Quantity Generator and is subject to all Federal and State of Maryland HW regulations.

The FMMD HW generator identification number is **MD9210020567**.

3.2 Applicability

All HWs generated within the fence line of FMMD are required to be reported and are subject to all applicable HW regulations.

FMMD tenants do not maintain separate EPA HW generator ID numbers and are included in the FMMD HWMP. All HW generators, including Garrison activities, military units, contracted activities, and tenant organizations, on FMMD must comply with the provisions of this Plan.

3.3 HW Generators

There are two types of HW generators on FMMD: units/activities/tenants that generate HW on a regular basis and units/activities/tenants that do not routinely generate waste but may occasionally generate some HW. Visiting units/activities/tenants utilizing FMMD for training are included in the HWMP and are responsible for adhering to the requirements of this Plan.

Visiting units/activities/tenants utilizing FMMD cannot bring hazardous waste on the installation. FMMD is prohibited from receiving HW from off the installation.

Units/activities/tenants that generate HW on a regular basis operate Satellite Accumulation Areas (SAA) at or near the point of generation of the waste. These sites are required to be managed by an EO or otherwise trained and appointed representative. Units/activities/tenants that don't routinely generate waste but may occasionally generate some HW are considered exempt or episodic generation points. These locations do not routinely generate and do not accumulate or store hazardous waste. The episodic generation event can be a planned event, such as an inventory cleanout, or an unplanned event, such as a spill or the generation of waste through an unexpected product recall.

Table 3.3 – List of FMMD Hazardous Waste Generators and Satellite Accumulation Areas

Generating Unit/Activity	Building Number	SAA (Y/N)
DLA Disposition Services	77	Y
Defense Information School	6500	Y
Melwood	2501	Y
MWR Auto Craft Shop	6530	Y
AAFES Main PX	2791	N
55th Signal Brigade	8485	Y
Forensic Toxicology Drug Testing Lab (FTDTL)	2490	Y
ECS 86, (99th RSC)	2120C	Y
818th (99th RSC)	2121	Y
Public Health Command (PHC)	4411	Y
Kimbrough Ambulatory Care Clinic (KACC)	2480	Y
Skookum Maintenance	2241D	Y

4. HAZARDOUS WASTE IDENTIFICATION

4.1 Hazardous Waste Identification Requirement

Hazardous waste management is subject to numerous regulatory requirements; regulatory infringements 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.

FMMD 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 4.2, 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.

Not all waste that has to be managed on FMMD is hazardous waste. There is waste considered non-Hazardous or non-RCRA waste that although it is not technically hazardous waste, it still needs to be managed properly and disposed through the Controlled Hazardous Substance Storage Facility. An example, is oil and grease contaminated rags and absorbents. These rags are potentially non-Hazardous Waste, but still need to be containerized and turned in properly.

Refer to Annex 1 – Hazardous Waste User Guides for the proper management of the most common Hazardous, non-Hazardous, and Universal Wastes.

4.2 Hazardous Waste Identification Process

40 CFR §262.11 require any person who produces or generates a waste must determine if that waste is hazardous. Figure 4-1 outlines the steps (based on regulatory guidance) in the HW identification process.

Wastes may be identified in the following two ways:

1. Generator's Knowledge

A generator can follow the procedures presented in Figure 4-1 or by using the information on a Safety Data Sheet (SDS). Additional acceptable generator’s knowledge can include waste origin, composition, and the process producing the waste. Each unit/activity/tenant is responsible for notifying the Hazardous Waste Program Manager when a new waste is being generated or when there has been a change in a waste generating process.

2. Laboratory Analysis

A laboratory analysis can help identify unknown wastes or specific constituents of a waste stream. The Hazardous Waste Program Manager will determine if sampling is necessary to determine:

- The classification an unknown waste, or
- The characterization a known waste.

Figure 4-1. Hazardous Waste Identification Process

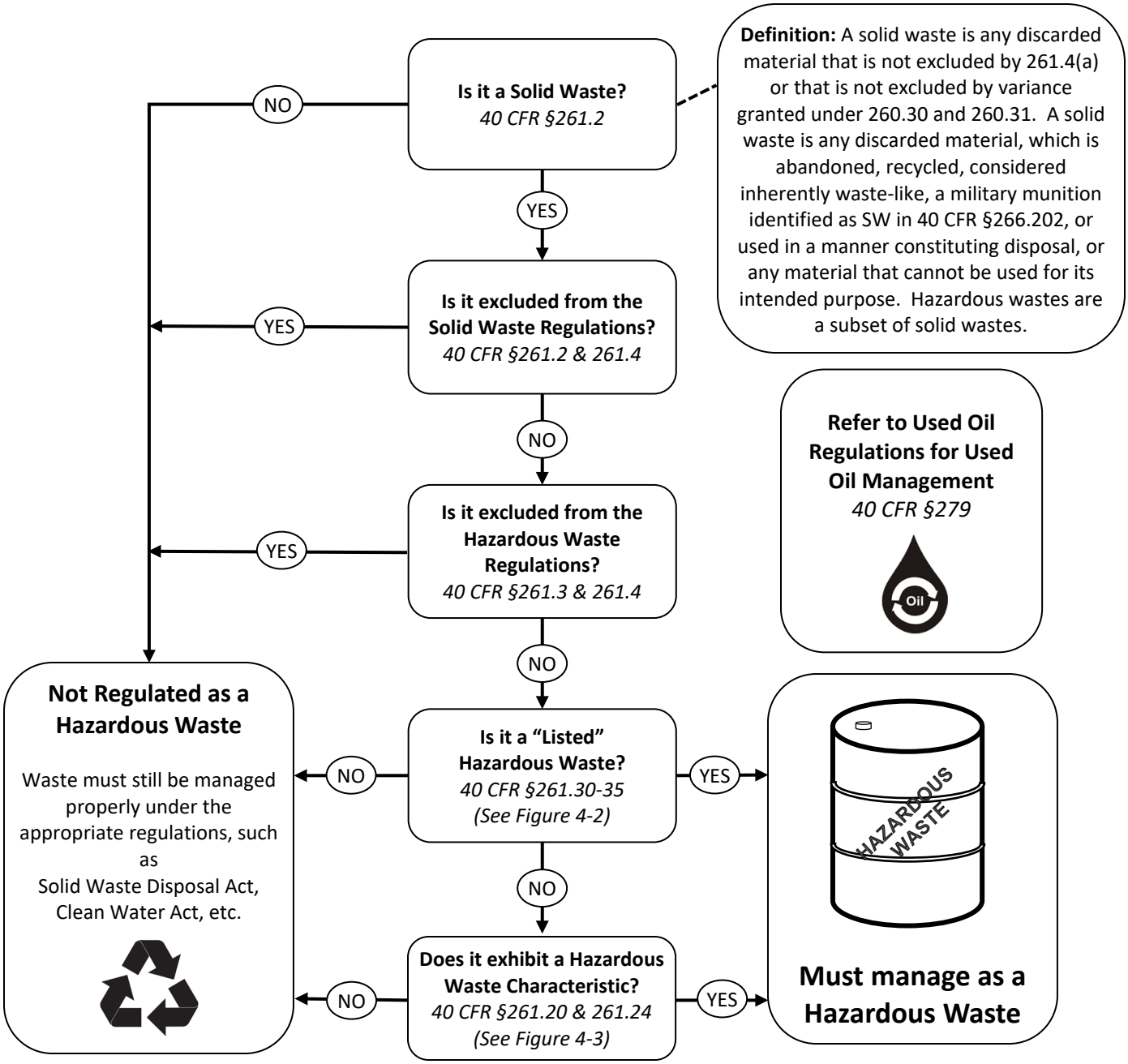


Figure source: Fort Knox Hazardous Waste Management Plan

5. HAZARDOUS WASTE ACCUMULATION AND TURN-IN PROCEDURES

This chapter defines the procedures that a FMMD unit/activity/tenant must follow when accumulating and turning in HW. All hazardous waste, non-hazardous waste, universal waste, and unusable hazardous materials will be transferred to the FMMD CHSSF for classification, consolidation, storage, packaging, and disposal.

5.1 Hazardous Waste Satellite Accumulation Area (SAA) Management

The SAA is the first step in the management of hazardous waste at FMMD. The SAA is a container or area established at or near the process generating the waste. Each FMMD unit/activity/tenant that has established an SAA will designate a trained Environmental Officer, or other appropriate representative, as the SAA manager.

5.1.1 SAA Container Management

The maximum amount of hazardous waste stored per SAA will not exceed 55-gallons. This is 55-gallons total of hazardous waste per SAA; not 55-gallons per waste stream. If universal waste or non-hazardous waste is stored near the SAA, good housekeeping practices must be practiced ensuring the wastes are clearly identified and not commingled.

Closed top drums/containers (containing liquids) are considered full when they reach 90% of the 55-gallon capacity. This allows room for expansion of material. Open top drums/containers (containing solids) should be filled to the top of the drum/container, compressing as much into the container as it will hold.

The SAA drum/container lid must be kept closed/secured at all times except to add or remove waste. The drum must be secured with a bung or quick release closure ring. If the waste product requires a funnel to expedite the transition from a transfer container to the drum/container, that funnel can be used and stored in the SAA providing the funnel is re-sealable and clean. If drum funnel is attached to the container, ensure that the drum funnel is closed and secured when not in use.

5.1.2 SAA Container Labeling and Marking

Containers used for the accumulation and transportation of HW are properly labeled in accordance with (IAW) applicable laws and regulations. Each container is properly marked and labeled from the SAA to the FMMD 90-day area to disposal/turn-in. The waste-generating activity ensures that the label on each waste container is clearly visible for inspection.

During accumulation at an SAA, HW containers are marked with the following:

- The words “Hazardous Waste.”
- A description of the contents of the container, such as waste paint, waste paint filters, or waste rags/solvent.
- The hazards associated with the waste, such as flammable, corrosive, or toxic.

FMMD markings on SAA containers are:

- Durable.
- In English, and/or appropriate host nation language.
- Printed on or affixed to the surface of a package or on a label, tag or sign displayed on a background of sharply contrasting color.
- Unobscured by labels or other attachments.
- Located away from any other markings that might substantially reduce visibility.

5.1.3 **SAA Container Turn In Process**

Once an SAA container accumulates 55-gallons of HW (or 1 quart of acute HW), the EO or SAA site manager marks the container with the date that 55 gallons (or 1 quart of acute HW) is exceeded, calls/emails the FMMD Hazardous Waste Program Manager with the waste that was generated and transfers the waste to the 90-day CHSSF within 72 hours.

5.2 Controlled Hazardous Substance Storage Facility (CHSSF)

The CHSSF is the 90-day area management point managed by the FMMD Hazardous Waste Program Manager. The Storage Facility is where all hazardous waste is transferred to from SAA and from episodic generation.

- All hazardous and non-hazardous/non-regulated waste drums/containers are moved to the CHSSF by the EO or other representative of the waste generating activity/unit.
- The drum/container will be weighed, and the weight recorded on the container and turn in forms.
- The drum/container will be marked with the accumulation date and stored in the appropriate location.
- The drum/container will be marked and labeled in accordance with USDOT regulations prior to shipment for disposal.
- The following hazardous wastes will be segregated in separate storage locations at the CHSSF.
    - Corrosives
    - Flammable/ignitable
    - Oxidizers
    - Miscellaneous (Other waste categories with specific segregation requirements)

5.3 Hazardous Waste Management

The following general management procedures will be established at all hazardous, universal, and non-hazardous waste storage areas, including the CHSSF, SAA, and other accumulation areas.

- Wear proper personal protective equipment (PPE) before handling waste.

- Ensure the waste accumulation and storage points have controlled access.
- Do not accumulate old, expired, excess, unnecessary hazardous materials on site. Follow turn in procedures to remove these items from your accumulation and storage areas.
- Ensure proper container management of all hazardous, universal, and non-hazardous waste.
  - Place waste in proper containers in good condition.
  - Containers will be kept closed except when adding or removing contents.
  - All waste containers are labeled accordingly. See Annex 1 - Waste User Guides.
  - Store containers out of the elements, protected from adverse weather conditions.
- Provide sufficient aisle space for unobstructed movement of personnel and fire and spill control equipment in an emergency.
- Minimize the potential for spills and accidental releases by complying with the Fort Meade Spill Prevention, Control, and Countermeasure Plan (SPCCP) and following general spill prevention and response.
    - Spill response equipment must be maintained in or near the storage area.
    - See Annex 5 – Spill Prevention and Response for more information.

5.4 Hazardous Waste Turn In Process

When a unit/activity/tenant on FMMD generates hazardous waste, either at an SAA or from an episodic generation event, that waste is transferred to the CHSSF.

For SAA Generation Points

1. When the hazardous waste drum/container at the SAA is full, the unit/activity/tenant has 72-hours to transfer the drum/container to the CHSSF.
2. For non-hazardous waste, such as oil-containing absorbents, the unit/activity/tenant will transfer the container when it is full. The 72-hour transfer rule does not apply to non-hazardous waste.
3. The unit/activity/tenant EO or other representative notifies the Hazardous Waste Program Manger via email or phone with a list of waste being transferred.
4. The unit/activity/tenant EO or other representative safely delivers the waste to the CHSSF.
5. There is **no dumping allowed** at the CHSSF. The waste can only be accepted at the CHSSF if the Hazardous Waste Program Manager is available to accept the waste.

Episodic Waste Generation Events - When hazardous or non-hazardous waste is generated by a non-routine event at a location that does not have an SAA.

1. On the day the waste is generated, the unit/activity/tenant representative notifies the Hazardous Waste Program Manager via email or phone of the waste and the need to transfer to the CHSSF.
2. The waste is not accumulated at the unit/activity/tenant. The waste is safely transferred to the CHSSF.

3. There is **no dumping allowed** at the CHSSF. The waste can only be accepted at the CHSSF if the Hazardous Waste Program Manager is available to accept the waste.

5.5 Completing a DD Form 1348-1A, Electronic Turn In Document (ETID)

The DD Form 1348-1A is the required document to submit waste to DLA Disposition Services. The form serves as the receipt for property turned in and is an important record for auditability.

To access and properly fill in a Form 1348, utilized the DLA reference website, *How do I properly fill out a DD Form 1348-1A?* Go to the below link for step-by-step instructions on how to complete the form and the required for each block.

https://www.dla.mil/Disposition-Services/DDSR/Turn-In/1348-Help/

5.6 Hazardous Waste Storage Compatibility

The following chart is to be used as a reference for the compatible storage of hazardous wastes and hazardous materials. The chart is meant as a guide only. Refer to the safety data sheet for specific storage details for each hazardous product.

Figure 5-1 Incompatible Materials Chart

NEVER STORE THESE → WITH THESE							
Label	**Common Material**	**Haz Group**	**+**	**Keep Away From**	**Haz Group**	**=**	**Result**
	ACIDS Battery Acid, Sulfuric Acid, Muriatic Acid	CORROSIVE Acids	+	Paint, Thinner, Decon Kits, Fuel, Solvents Soaps, Detergents, Ammonia Calcium Hypochlorite, Bleach, Pure Oxygen	Flammables Caustics Oxidizers	=	Toxic Gas Excessive Heat Violent Reaction
	SOAP/DETERGENT Soaps, Floor Soap, Comet, Ammonia, Sodium Hydroxide, Sodium Bicarbonate	CORROSIVE Caustic/Alkalis/ Bases	+	Paint, Thinner, Decon Kits, Fuel, Solvents Battery Acid, Sulfuric Acid, Muriatic Acid Calcium Hypochlorite, Bleach, Pure Oxygen	Flammables Acids Oxidizers	=	Toxic Gas Excessive Heat Violent Reaction
	ADHESIVES Epoxies, Binders, Hardeners	CORROSIVE Caustic/ Alkalis/ Bases	+	Paint, Thinner, Decon Kits, Fuel, Solvents Battery Acid, Sulfuric Acid, Muriatic Acid Calcium Hypochlorite, Bleach, Pure Oxygen	Flammables Acids Oxidizers	=	Excessive Heat Fire
	WATER TREATMENT CHEMICALS/ACIDS Citric Acid, Muriatic Acid	CORROSIVE Acids	+	Paint, Thinner, Decon Kits, Fuel, Solvents Soaps, Detergents, Ammonia Calcium Hypochlorite, Bleach, Pure Oxygen	Flammables Caustics Oxidizers	=	Explosive Gases Excessive Heat Fire Toxic Gases
	WATER TREATMENT CHEMICALS/BASES Tri-Sodium Phosphate, Caustic Soda, Calcium Hypochlorite (Also Corrosive)	CORROSIVE Caustic/ Alkalis/ Bases	+	Paint, Thinner, Decon Kits, Fuel, Solvents Battery Acid, Sulfuric Acid, Muriatic Acid Bleach, Pure Oxygen	Flammables Acids Oxidizers	=	Explosive Gases Excessive Heat Fire Toxic Gases
	OXIDIZERS Chlorine (Laundry Bleach), Calcium Hypochlorite, Calcium Oxide, Hydrogen Peroxide, Liquid or Compressed Oxygen	OXIDIZERS	+	Oxidizers should not be stored with any other types of material	Flammables Caustics Acids	=	Fire Explosion ** POL exposed to compressed oxygen will explode violently
	POL Oil, Hydraulic Oil, Grease, Break Free, Graphite Spray, Silicone Spray, WD-40, Fuel	FLAMMABLE	+	Soaps, Detergents, Ammonia, Calcium Hypochlorite, Bleach, Pure Oxygen Battery Acid, Sulfuric Acid, Muriatic Acid	Caustics Oxidizers Acids	=	Fire Violent Reaction Excessive Heat
	PAINTS Primers, Enamel, Strippers, Spray Paint	FLAMMABLE	+	Soaps, Detergents, Ammonia Calcium Hypochlorite, Bleach, Pure Oxygen Battery Acid, Sulfuric Acid, Muriatic Acid	Caustics Oxidizers Acids	=	Fire Violent Reaction Excessive Heat
	SOLVENTS Parts Washer Fluid, Degreasers, Alcohols, Acetone, MEK, Toluene	FLAMMABLE	+	Soaps, Detergents, Ammonia Calcium Hypochlorite, Bleach, Pure Oxygen Battery Acid, Sulfuric Acid, Muriatic Acid	Caustics Oxidizers Acids	=	Fire Violent Reaction Excessive Heat
	BATTERIES Automotive Batteries Contain Acid	CORROSIVE Acids	+	Soaps, Detergents, Ammonia Calcium Hypochlorite, Bleach, Pure Oxygen Paint, Thinner, Decon Kits, Fuel, Solvents	Caustics Oxidizers Flammables	=	Explosive Gases Excessive Heat Fire Toxic Gases
	PESTICIDES	POISON	+	Do not store with food products; may react with other hazardous chemicals		=	Poison Chemical Reaction

6. UNIVERSAL WASTE MANAGEMENT

This chapter identifies universal wastes routinely generated by FMMD units/activities/tenants and provides brief descriptions on how to manage them.

Universal waste generated at FMMD is managed similar to HW. However, once subject to the universal waste regulations, universal wastes are not counted toward an organization's waste generation. In general, materials managed as universal waste can be stored for up to one year.

Maryland's Universal Waste Rule (COMAR 26.13.10.06) encourages the collection and recycling of the following hazardous waste that are identified as Universal Wastes - lamps, including fluorescent lamps; batteries; pesticides that are part of a recall or collection program; mercury-containing equipment; and fluorescent light ballasts that contain polychlorinated biphenyls (PCBs). The EPA added aerosol cans to universal waste rule. The State of Maryland has authorized the EPA to implement the rule. Although the MDE has not yet adopted the aerosol waste regulations within the COMAR 26.13.10.06.

Refer to Annex 1 – Hazardous Waste User Guides for more details on the management of the common universal wastes.

6.1 Universal Waste Batteries

Batteries on FMMD are managed as HW in accordance with the universal waste regulations. Universal waste labels are applied to the container by the generating unit or activity. Batteries managed as universal waste on FMMD include magnesium, lithium ion, lithium metal, nickel-cadmium, and mercury. Contact the Hazardous Waste Program Manager for disposal.

Refer to Annex 1 – Hazardous Waste User Guides for more details on Universal Waste battery management.

Special precautions for battery storage and disposition are listed in Table 6.1.1 below.

Table 6.1.1 - Battery Quick Reference Table

Battery	Associated Hazards	Packaging	Special Requirements
Alkaline, Nickel Metal Hydride and Zinc Air	• Potassium hydroxide • Non-Hazardous, Not Regulated Waste	No packaging required	9-volt batteries must have the terminals taped prior to turn-in or shipping.
Lead-Acid	• Sulfuric acid • Lead and salts • Hazardous or Universal Waste • Managed under 40CFR 266G	Undamaged batteries are to be banded securely to a pallet with electrolytes & caps in place & turned into CHSSF.	Protect from freezing. Stack no more than two layers high.

			Plug holes if caps are missing.
Lithium-Sulfur Dioxide	• Pressurized cells contain sulfur dioxide • Lithium metal • Universal Waste	Package damaged and undamaged batteries separately in suitable containers for transport.	Discharge and vent batteries prior to disposal. Label as "Used Lithium Batteries."
Magnesium	• Generates hydrogen • Universal Waste	Package batteries in a suitable container for transport, i.e., 3 ½ gallon container.	Label "Used Magnesium Batteries."
Mercury	• Potassium hydroxide • Mercury and mercury salts • Generates hydrogen gas • Universal Waste	Package batteries in a suitable container for transport, i.e., 3 ½ gallon container.	Label "Used Mercury Batteries."

6.2 Universal Waste Lamps

Used lamps on FMMD are managed as UW in accordance with the universal waste regulations. Universal waste labels will be applied to the container by the generating unit or activity.

Except for incandescent light bulbs, this category includes all other lamps such as fluorescent lamps, high intensity discharge, neon, mercury vapor, high pressure sodium. Fluorescent lamps contain toxic metals such as mercury and lead.

Refer to Annex 1 – Hazardous Waste User Guides for more details on Universal Waste lamp management.

7. HAZARDOUS WASTE MANIFEST

7.1 Manifest Purpose

FMMD generators who offer for transport HW for off-site treatment, storage, or disposal must prepare a HW manifest. The Hazardous Waste Program Manager is responsible for preparing the waste disposal documents for DLA. DLA prepares the manifests for waste managed in their disposal contract. The EO or other representatives of units/activities/tenants that generate hazardous waste are not responsible for preparing the HW manifest. A HW manifest is not required for HW that is only transported within the boundaries of the installation, such as from an SAA to the CHSSF.

7.2 Required Copies

A manifest, EPA Form 8700-22, must accompany all shipments of hazardous waste. Copies of the manifest must be prepared so that FMMD, all transporters, and the final disposal facility each have at least one copy. When the generator receives the returned-signed copy of the manifest, it must be maintained on file for at least three (3) years. FMMD uses the e-Manifest system for tracking hazardous waste manifests.

8. TRAINING REQUIREMENTS

This chapter describes the training personnel must receive under Federal, State, and DOD regulations. To help prevent personal injury, or harm to public health and the environment, concerted efforts must be made by all FMMD personnel to ensure environmental training requirements are met and environmental stewardship is incorporated into all mission, duties, and activities.

8.1 Training Guidance

In accordance with AR 200-1, 15–3. *Environmental training, awareness, and competence*, all personnel who perform tasks that can cause significant environmental impacts will be competent on the basis of appropriate education, training, and/or experience.

All personnel in assigned units/activities/tenants on FMMD who, because of their job assignment, are required to handle HM and HW, and are involved in the generation, collection, transportation and turn-in of HM/HW shall be given orientation and/or appropriate training in the proper control of HM and HW through enrollment in the EO course.

The Environmental Division is responsible for conducting or facilitating training and ensuring HW management training is performed in accordance with this section.

8.2 Hazardous Waste Program Manager and Controlled Hazardous Substance Storage Facility Personnel

Environmental Division personnel who manage UW/HW at the CHSSF must receive the following training:

- RCRA Facility Compliance – Annual Refresher
  - This course should cover relevant Federal, State, and Army guidance for hazardous waste and universal waste management, including storage, labels, marking, accumulations time limits, and turn in/disposal.
- Transportation of Hazardous Material & Hazardous Waste - Initial
- Transportation of Hazardous Materials & Hazardous Waste - Refresher course every two (2) years
  - The Transportation of HM/HW Initial and Refresher course are to be completed in accordance with the requirements in *Defense Transportation Regulation 4500.9-R-Part II Cargo Movement, Chapter 204 HAZMAT, Section D.1.h.*

8.3 Environmental Officer or Unit/Activity/Tenant Appointed Personnel

The following training is required for FMMD EOs and unit/activity/tenant personnel who manage HM, HW, and/or the SAA at the generating activity.

- FMMD 24-hour Hazardous Waste Management - Initial Training
- FMMD 8-hour Hazardous Waste – Annual Refresher Training

Position	FMMD Hazardous Waste - Initial	FMMD Hazardous Waste - Annual Refresher	Transportation of HM/HW - Initial	Transportation of HM/HW - Refresher every 2-years	Hazardous Waste Annual Refresher
Hazardous Waste Program Manager			X	X	X
CHSSF Personnel	X				X
Environmental Officer	X	X			
Hazardous Material/Waste/POL Handler	X	X			
Facility/Building Manager	X	X			

9. RECORDKEEPING AND REPORTING

This chapter is intended to provide a brief summary of the current regulatory reporting and record keeping requirements. All regulatory records are maintained by FMMD Environmental Division. Documents may be requested for review by Federal, State or DOD agencies at any time and must therefore be readily available.

9.1 HW Manifest and Land Disposal Restrictions

The Hazardous Waste Program Manager must review manifest documents to ensure receipt of the disposal facility copies of the manifests. A signed copy must be received from the designated transport, storage, disposal facility within 45 days from the date the initial transporter signed the manifest.

The Environmental Division and DLA will maintain HW manifests for at least three (3) years IAW 40 CFR §262.40(a). Manifests should be kept with the applicable Land Disposal Notification/Certification forms.

All waste streams with treatment standards indicated in 40 CFR §268.40 or §268.45 must have a onetime written notification/certification sent to each treatment, storage, disposal, or recycling facility with the initial shipment of that waste stream. These forms are kept with the signed manifest copy.

9.2 Waste Analysis and Hazardous Waste Profile Sheets (DRMS Form 1930)

Each waste stream must be evaluated to determine if it is a hazardous waste as defined by 40 CFR §261 and to determine the proper waste code. A waste analysis form or waste profile (developed by the disposal facility) is used to document the determination of hazardous waste.

These records should be kept separate from the Land Disposal Notification/Certifications and manifests.

Analytical data from laboratory testing, waste analyses, and other determinations/profiles will be retained on file by the Environmental Division and DRMS for at least three (3) years (40 CFR §268.7(a) (8)).

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

9.3 Exception Reports

FMMD will contact the transfer, storage, disposal facility to determine the status of the waste if the manifest is not received within 35 days. FMMD will submit an exception report to MDE and EPA if a signed copy of the manifest is not received from the receiving facility within 45 days from the date the waste was accepted by the initial transporter. The exception report consists of the following:

- A legible copy of the manifest for which the generator does not have confirmed delivery,
- A letter indicating that the FMMD facility hasn't received the facility's signed manifest, and
- A cover letter, signed by the generator explaining the efforts taken to locate the hazardous waste and the results of those efforts.

These reports should be kept with a copy of the manifest in question.

9.4 Biennial Report

FMMD is a large quantity generator and therefore, is required to submit biennial reports as required by the EPA and MDE. The report will be submitted by March 1 on forms provided by the MDE.

The biennial report is completed and submitted by the Environmental Division.

A copy of the annual report must be kept on file and available for inspection by Federal or State agencies for at least three (3) years from the due date of the report.

9.5 Inspection Forms

The following inspection forms will be maintained by the Environmental Division for three (3) years:

- Controlled Hazardous Substance Storage Facility, 90-day, Weekly Inspections
- SAA Monthly Inspection
- Annual "Internal EPAS" inspection checklist conducted by the Environmental Division

9.6 Training Records

The Environmental Division maintains all HW training records for three (3) years.

FMMD HAZARDOUS WASTE MANAGEMENT PLAN - ANNEX

- Annex 1 – Hazardous Waste Profile Sheet Index
- Annex 2 – Hazardous Waste User Guides
- Annex 3 – Completing a DD Form 1348-1A for Hazardous Waste
- Annex 4 – Environmental Officer Appointment Memo
- Annex 5 – FMMD Inspection Forms
  - Fort Meade Annual Hazardous Waste Compliance Inspection
  - FMMD Unit/Activity/Tenant Environmental Compliance and SAA Inspection
- Annex 6 – Spill Prevention and Response

Annex 1 – Hazardous Waste Profile Sheet Index and Waste User Guides

The FMMD hazardous waste profile sheet reference number is provided on the User Guides. FMMD Environmental Division has additional profile sheets. Contact the Hazardous Waste Program Manager for the Hazardous Waste Profile Sheet Index.

PROFILE NUMBER	HAZARDOUS WASTE PROFILES	WASTE CODES	GENERATOR
FGGM-18-01	> 500 PPM TRANSFORMER	M001	2250
FGGM-18-03	50-499 PPM TRANSFORMER	MT01	2250
FGGM-18-04	VENTED STORAGE CABINET CARBON FILTERS	D001, D007	FTDTL
FGGM-18-05	SILANIZATION WASTE	D002, F003, F005	FTDTL
FGGM-18-06	EXTRACTION WASTE	D001,F002,F003	FTDTL
FGGM-18-07	GC/MS SAMPLE VIALS	D001,F003	FTDTL
FGGM-18-10	POTASSIUM CHLORATE	D001	2250
FGGM-18-15	OIL BASED PAINT	D001	2250
FGGM-18-16	PAINT RELATED MATERIAL	D001	2250
FGGM-18-17	SODIUM CHLORATE	D001	2250
FGGM-18-18	PROPANE COMPRESSED GAS	D001	2250
FGGM-18-21	FUSEE/FLARE	D001	2250
FGGM-18-23	SILVER NITRATE	D001, D011	KACC
FGGM-18-40	CONTAMINATED DIESEL FUEL	D001, D018	2250
FGGM-18-41	LEAD ACID BATTERY WET	D002, D008	2250
FGGM-18-46.v.3	WASTE FLAMMABLE LIQUIDS	D001,D008,D018,F001,F003	2250
FGGM-18-47	HYDROCHLORIC ACID	D002	2250
FGGM-18-48	DECON KITS M258A1 (GREEN)	D001	2250
FGGM-18-49	DECON KITS M58A1 (BLACK)	D001	2250
FGGM 18-50***	NIGHT VISION IMAGE INTIENSIFIER TUBES	D006,D008	2250
FGGM-18-53	FUEL SPILL CLEAN UP MATERIAL	D001,D018	2250
FGGM-18-58.v.3	BROKEN MERCURY LAMPS	D009	2250
FGGM-15-65	QIAGEN KITS EXTRACTION WASTE	D001	PHC-N
FGGM 18-71	DNA EXTRACTION WASTE	D001	PHC-N
FGGM-18-82	MAGMAX PURE KIT EXTRACTION WASTE	D001	PHC-N
FGGM-18-83	HEMATOLOGY SLIDE WASTE	D001, F003	KACC
FGGM-18-84	LEAD CONTAMINATED AIR FILTERS	D008	AWG
FGGM-18-85	FUEL FILTERS	D001,D018	2250
FGGM-18-86	THIN PREP	D001	KACC
FGGM-18-87	LEAD CONTAMINATED WASH WATER	D008	AWG
FGGM-18-88	LEAD CONTAMINATED/RAGS/PPE	D008	2250
FGGM-18-89	CAVICIDE SURFACE CLEANER WIPES	D001	KACC
FGGM-18-91	CAL STAT PLUS HAND CLEANER	D001	KACC
FGGM-18-92	HYDROGEN PEROXIDE	D001	KACC
FGGM-18-93	AMMONIA INHALANT	D001, D002	KACC
FGGM-18-94	TRIPLE ENZYME CONCENTRATE	D001	KACC

FGGM-18-95	ULTRASONIC CLEANER	D001, D002	KACC
FGGM-18-96	DENTAL AMALGAM	D002, D009	KACC
FGGM-18-97	CHLORHEXIDINE GLUCONATE SOLUTION	D001	KACC
	2020 HW PROFILES		
FGGM-20-01.V.2	ACETIC ACID SOLUTION	D001,D002	KACC
FGGM-20-02	CONTAMINATED GASOLINE	D001,D018	2250/2246
FGGM-20-03-A1	OUT OF DATE OR OFF SPEC MEDICAL PRODUCTS	D001,D002	KACC
FGGM-18-66	10% BUFFERED FORMALIN	D001	KACC
FGGM-18-81	CR PHOSPHOR PLATE CLEANER	D001	KACC
FGGM-18-20	PEST AGENTS AND DISINFECTANTS	D001	2250
FGGM-18-50	LEAD CONTAMINATED DEBRIS	D008	2250/KACC/AWG
FGGM-18-04	ACTIVATED CARBON FILTERS	D007	FTDTL/2250
	2021 HW PROFILES		
FGGM-18-14	FLAMMABLE AEROSOLS	D001	2250
FGGM-18-42	SODIUM HYDROXIDE SOLUTIONS	D002	AWG/2250
FGGM-18-18	PROPANE CYLINDER	D001	AWG/2250
FGGM-18-19	ACETYLENE CYLINDER	D001	AWG/2250
FGGM-18-45	DISINFECTANTS	D002	KACC
	2022 HW PROFILES		
FGGM-18-08	ETHANOL	D001	2250/KACC
FGGM-18-09	ISOPROPANOL	D001	2250/KACC
FGGM-18-39	CAUSTIC ALKALI COMPOUNDS	D002	KACC
FGGM-18-24	HYDROXYLAMINE.HCI	D002	KACC
FGGM-18-25	SODIUM PERIODATE	D001	KACC
	NON-REGULATED PROFILES		
FGGM-NR-001	R134 A REFRIGERANT GAS	NON REG	2250
FGGM-NR-002	LATEX PAINT	NON REG	2250
FGGM-NR-003	RCRA EMPTY CONTAINERS	NON REG	2250
FGGM-NR-004	ALKALINE BATTERIES	NON REG	2250
FGGM-NR-005	USED ANTIFREEZE	NON REG	2250
FGGM-NR-006	OIL SPILL CLEAN UP MATERIAL	NON REG	2250
FGGM-NR-007	NON PCB LAMP BALLASTS	NON REG	2250
FGGM-NR-008	USED OIL FILTERS	NON REG	2250
FGGM-NR-009	CIDEX OPA	NON REG	KACC
FGGM-NR-010	M8 DETECTOR PAPER	NON REG	2250
FGGM-NR-011	M291 AMBERGUARD-555 DECON KIT	NON REG	2250
FGGM-NR-012	EUGENOL	NON REG	KACC
FGGM-NR-013	IODOFORM PACKING STRIPS	NON REG	KACC
FGGM-NR-014	ARESIN MICROSPHERES	NON REG	KACC
FGGM-NR-015	SIEVE MOLECULAR	NON REG	KACC

FGGM-NR-016	ULTRA SOLUTION KIT	NON REG	KACC
FGGM-NR-017	GLYCERIN USP	NON REG	KACC
FGGM-NR-019	ULTRA SOUND GEL	NON REG	KACC
FGGM-NR-020	FERRIC SUBSULFATE SOLUTION	NON REG	KACC
FGGM-NR-021	OILY RAGS	NON REG	2250
FGGM-NR-022	BD E-Z SCHRUB	NON REG	KACC
FGGM-NR-023	XEROFORM PETROLEUM DRESSING	NON REG	KACC
	2020 NON-REGULATED PROFILES		
FGGM-NR-024	ABSORBENT MEDIA	NON REG	2250/2246
FGGM-NR-025	USED OIL	NON REG	2250/2246
FGGM-NR-026	SYNTHETIC OILS	NON REG	2250/2246
FGGM-NR-027	DRY CHEMICAL FIRE EXTINGUISHER AGENT POWDER	NON REG	2250/77A
FGGM-NR-018	TRANSPORT MEDIA	NON REG	2250/KACC
FGGM-NR-028	COOKING OIL	NON REG	2250
	2021 NON-REGULATED POFILES		
FGGM-NR-029	NON-REGULATED MATERIAL SOLID	NON REG	2250
FGGM-NR-030	CARBON DIOXIDE COMPRESSED GAS	NON REG	2250
FGGM-NR-031	NON-REGULATED MATERIAL LIQUID	NON REG	PHC/2250
	UNIVERSAL WASTE		
FGGM-UW-001	FLUORESCENT LAMPS	U/W	2250
FGGM-UW-002	LITHIUM BATTERIES	U/W	2250
FGGM-UW-004	MERCURY THERMOSTATS	U/W	2250
FGGM-UW-005	HD LAMPS	U/W	2250
	2020 UNIVERSAL WASTE PROFILES		
FGGM-UW-006	UW/PESTICIDES	U/W	2250
	2021 UNIVERSAL WASTE PROFILES		
FGGM-UW-007	NICKEL METAL HYDRIDE BATTERIES	U/W	2250
FGGM-UW-008	NICKEL CADMIUM BATTERIES	U/W	2250

Annex 2 – Hazardous Waste User Guides

ABSORBENTS-USED

POSSIBLE CONTAMINANTS OF CONCERN

Absorbent material (e.g., dry sweep, cloth towels, booms, etc.) saturated with POL or other materials may be flammable and/or toxic.

CHARACTERIZATION

Absorbent materials contaminated with POL are considered **non-hazardous waste**. Absorbent material contaminated with other hazardous material such as paint thinner may be hazardous waste.

CONTAINER MARKING AND HANDLING PROCEDURES

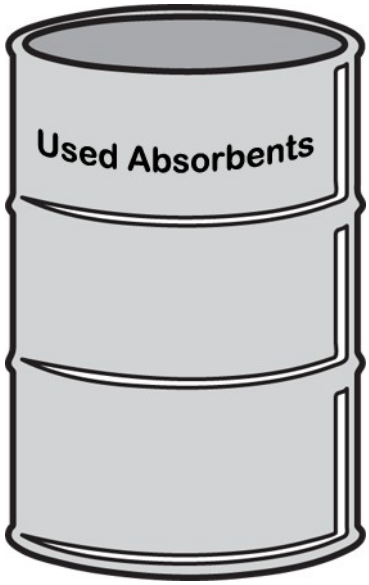
Step 1 Double-bag used absorbent materials. Consider using an open-top drum lined with a bag to accumulate the absorbent material, or some similar method.

Step 2 Mark containers with the words “Used Absorbents” before adding any waste.

Step 3 Make sure containers are in the proper accumulation point.

Step 4 Put waste in the bags. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container or bag is closed.

Step 5 When the bag/container is full, or sooner as needed, contact the Hazardous Waste Program Manager for disposal.



GENERAL INFORMATION

Keep absorbents contaminated with hazardous waste separate from POL-saturated absorbents and contact the Fort Meade Hazardous Waste Program Manager for disposal. Call the Hazardous Waste Program Manager if you clean up anything other than POL with absorbents. The Hazardous Waste Program Manager will provide guidance for proper disposal.

FMMD Meade Hazardous Waste Profile Number: FGGM-NR-024

ADHESIVES AND SEALANTS

POSSIBLE CONTAMINANTS OF CONCERN

Adhesives and sealants are made up of combinations of chemicals suspended in a solvent that partially evaporates during use. The solvents found in these products vary, but some common ones include 1,1,1- trichloroethane, MEK, and toluene. Adhesives and sealants may also be flammable and may contain heavy metals such as lead, chromium, and cadmium. Refer to the SDS for specific hazards.

CHARACTERIZATION

Spent adhesives and sealants, and wastes generated from use of these materials such as gloves, stir sticks, and old material removed during replacement, are considered **hazardous waste**.

CONTAINER MARKING AND HANDLING PROCEDURES

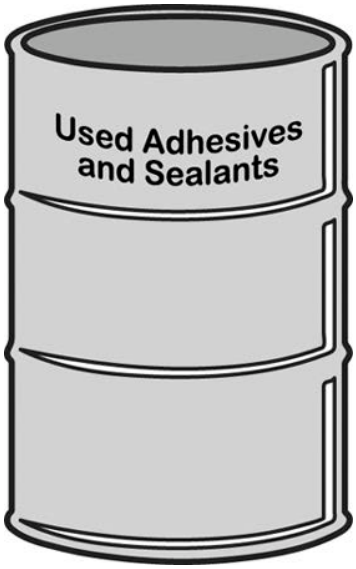
Step 1 Obtain an open-top, UN/NA-rated drum from the Fort Meade Hazardous Waste Program Manager. Drum must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark the container with the words "Used Adhesives and Sealants" before adding any waste.

Step 3 Make sure container is in a designated SAA within secondary containment.

Step 4 Put waste and waste containers in the drum. Do not pour liquids in the drum. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 5 When the container becomes full, mark the date on it and contact the Hazardous Waste Program Manager within 72 hours for disposal.



GENERAL INFORMATION

None

AEROSOL CANS – HAZARDOUS WASTE

POSSIBLE CONTAMINANTS OF CONCERN

Aerosols may be flammable, reactive, corrosive, and/or toxic depending on the contents of the cans and the gas involved.

CHARACTERIZATION

Aerosol cans that are no longer serviceable (e.g., broken nozzle), but that are still under pressure and/or still contain their contents, are **hazardous waste** and must be collected and turned in by contacting the Fort Meade Hazardous Waste Program Manager.

Empty aerosol cans are considered **hazardous waste** due to the residual pressure, propellants, and/or hazardous contents. Do not thrown empty aerosols in the trash. Contact the Fort Meade Hazardous Waste Program Manager for disposal.

NOTE: Empty aerosol cans that once held acutely hazardous chemicals or pesticides are hazardous waste. Call the Fort Meade Hazardous Waste Program Manager for guidance.

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Obtain an open-top, UN/NA-rated drum from the Fort Meade Hazardous Waste Program Manager. Drum must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark the container with the words “Waste Aerosol Cans” before adding any waste.

Step 3 Make sure container is in a designated SAA within secondary containment.

Step 4 Break off the aerosol can tip or sprayer.

Step 5 Put waste in the container. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 6 When the container becomes full or the SAA is near the 55-gallon capacity, mark the date on it, and contact the Hazardous Waste Program Manager within for disposal.

GENERAL INFORMATION

Make sure all aerosol cans are completely empty (or no longer serviceable) before contacting the Fort Meade Hazardous Waste Program Manager.

FMMD Meade Hazardous Waste Profile Number: Flammable Aerosols FGGM-18-14

ANTIFREEZE

POSSIBLE CONTAMINANTS OF CONCERN

Antifreeze typically contains ethylene glycol. However, other formulations have been developed recently using less toxic chemicals. Used antifreeze may contain low concentrations of toxic metals such as copper, zinc, lead, cadmium, chromium, and selenium. If the concentrations are high enough, the used antifreeze is hazardous waste antifreeze. An analysis is performed to determine any presence of toxic metals. Used filters and sludge from antifreeze recycling machines may also contain ethylene glycol and heavy metals.

CHARACTERIZATION

Currently used antifreeze is considered **used antifreeze** and recycled through the DLA-DS hazardous waste contract. If analysis of the antifreeze indicates high levels of metals, then the antifreeze is **hazardous waste antifreeze.**

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Obtain a closed-top, UN/NA-rated drum from the Fort Meade Hazardous Waste Program Manager for disposal. Drum must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark the container with words "Used Antifreeze" before adding any waste.

If the antifreeze is hazardous waste, mark the container "Hazardous Waste Antifreeze."

Step 3 Make sure container is in the proper accumulation point within secondary containment.

Step 4 Put waste in the container. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 5 When the container becomes full, **ensuring a 4" headspace**, mark the date on it, and contact the Hazardous Waste Program Manager within 72 hours for disposal.

GENERAL INFORMATION

Used antifreeze must be turned in by contacting the Fort Meade Hazardous Waste Program Manager.

FMMD Meade Hazardous Waste Profile Number: FGGM-NR-005

BATTERIES – LEAD ACID

(Non-Vehicle, GEL and NON-GEL)

POSSIBLE CONTAMINANTS OF CONCERN

The cells of gel and non-gel lead-acid battery contain lead and lead dioxide. Non-gel lead acid batteries also contain an acidic electrolyte solution of sulfuric acid. The solution is very corrosive.

CHARACTERIZATION

Non-vehicle lead-acid batteries are managed **as a universal waste** and turned in to EMD. It is illegal to dispose of a lead-acid battery in a dumpster.

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Until batteries are turned in, stack them within secondary containment**. Do not double stack batteries.**

Step 2 Mark the batteries or battery storage area "Used Batteries."

Step 3 Make sure batteries are in a proper SAA.

Step 4 Turn in batteries to Fort Meade EMD.

GENERAL INFORMATION

Batteries should be kept cool, dry, and away from open flame, heat, and combustibles. Do not store them in a way that might cause leakage.

Remember to always wear proper PPE listed on the SDS.

BATTERIES – LEAD ACID

(Damaged/Leaking)

(Vehicle/Non-vehicle)

POSSIBLE CONTAMINANTS OF CONCERN

The cells of gel and non-gel lead-acid battery contain lead and lead dioxide. Non-gel lead acid batteries also contain an acidic electrolyte solution of sulfuric acid. The solution is very corrosive.

CHARACTERIZATION

Damaged or leaking vehicle and non-vehicle lead-acid batteries are managed **as a hazardous waste** and turned in by contacting the Fort Meade Hazardous Waste Program Manager. It is illegal to dispose of a lead-acid battery in a dumpster. Only broken, leading vehicle batteries are turned in to the Hazardous Waste Program Manager.

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Until batteries are turned in, temporarily store them within secondary containment**. Do not double stack batteries.**

Step 2 Mark the batteries or battery storage area "Used Batteries."

Step 3 Make sure batteries are in a proper SAA.

Step 4 Turn in damaged/leaking batteries to the Fort Meade Hazardous Waste Program Manager.

GENERAL INFORMATION

Batteries should be kept cool, dry, and away from open flame, heat, and combustibles. Do not store them in a way that might cause leakage.

Remember to always wear proper PPE listed on the SDS.

FMMD Meade Hazardous Waste Profile Number: FGGM-18-41

BATTERIES—UNIVERSAL WASTE

Lithium, Nickel-Cadmium, Magnesium, and Mercury

POSSIBLE CONTAMINANTS OF CONCERN

Lithium Batteries. Lithium-sulfur dioxide batteries contain pressurized sulfur dioxide gas and lithium-thionyl chloride batteries contain liquid thionyl chloride that, upon exposure to air, vaporizes.

Magnesium Batteries. Magnesium batteries contain an electrolyte of an aqueous solution of magnesium bromide or magnesium perchlorate and/chromium. These chemicals can emit highly toxic fumes when heated.

Mercury Batteries. These batteries contain mercury and mercuric oxide, and a potassium hydroxide (KOH) or sodium hydroxide electrolyte. Mercury is a listed hazardous metal and highly toxic.

Nickel-Cadmium. There are two kinds of Ni-Cd batteries: sealed non-serviceable batteries without vent-filler caps (dry) and serviceable vented batteries with vent-filler caps (wet). The cell of a Ni-Cd battery typically contains cadmium, nickel, and a caustic electrolyte solution of potassium hydroxide (KOH). Cadmium is a listed hazardous metal and highly toxic.

CHARACTERIZATION

Lithium-sulfur dioxide, lithium thionyl chloride, nickel-cadmium, magnesium, and mercury batteries are **universal waste under Maryland Department of the Environment's Universal Waste Rule**.

If the batteries are damaged or drained, the electrolyte solution or any materials coming into contact with the solution, including the battery casing, should be disposed of as **hazardous waste**.

HANDLING PROCEDURES

Lithium Batteries. DO NOT DISCHARGE and turn in to the Fort Meade Hazardous Waste Program Manager as soon as possible. To prevent fires, which can happen if batteries come in contact with each other or with other metals, tape the battery terminals (or connections) with non-conductive tape. Electrical tape is preferred, but all adhesive tapes not made of metallic material will work.

Magnesium Batteries. Turn in to the Hazardous Waste Program Manager as soon as possible.

Mercury Batteries. Turn in to the Hazardous Waste Program Manager as soon as possible.

Nickel-Cadmium. Turn in to the Hazardous Waste Program Manager as soon as possible.

GENERAL INFORMATION

Segregate batteries by type. Store batteries away from moisture.

Collect universal waste batteries in separate containers and ensure that the containers are compatible for the type of batteries. Pre-labeled containers will be provided by the Hazardous Waste Program Manager.

All batteries will be discharged and if possible, vent holes and terminals taped over.

Small alkaline batteries such as AAA, AA, C, and D type may be thrown in the trash.

FMMD Meade Hazardous Waste Profile Number: FGGM-UW-007 Nickel Metal Hydride Batteries, FGGM-UW-008 Nickel Cadmium Batteries

CALCIUM HYPOCHLORITE

POSSIBLE CONTAMINANTS OF CONCERN

Calcium hypochlorite is generally available as a white powder, pellets, or flat plates. Calcium hypochlorite decomposes in water to release chlorine and oxygen. Calcium hypochlorite is toxic by the oral and dermal routes and can react to release chlorine or chloramine which can be inhaled.

CHARACTERIZATION

Unused calcium hypochlorite is considered a **hazardous waste**.

HANDLING PROCEDURES

Step 1 Turn in to the Fort Meade Hazardous Waste Program Manager any unused calcium hypochlorite in the container it came in as soon as it is declared a waste at the unit. Do not accumulate on site.

Step 2 Ensure that containers are marked or labeled with the contents.

GENERAL INFORMATION

Calcium hypochlorite should be stored in a dry, well-ventilated area at a temperature below 120°F, separated from acids, ammonia, amines, and other chlorinating or oxidizing agents.

FILTERS—FUEL

Diesel, JP-8, and MOGAS

POSSIBLE CONTAMINANTS OF CONCERN

JP-8 and MOGAS may contain VOCs such as benzene, toluene, trimethylbenzene, and xylene in varying levels. Refer to the SDSs for specific hazards.

CHARACTERIZATION

Fuel filters are **non-hazardous industrial wastes** and cannot be thrown in the dumpster.

CONTAINER MARKING AND HANDLING PROCEDURES

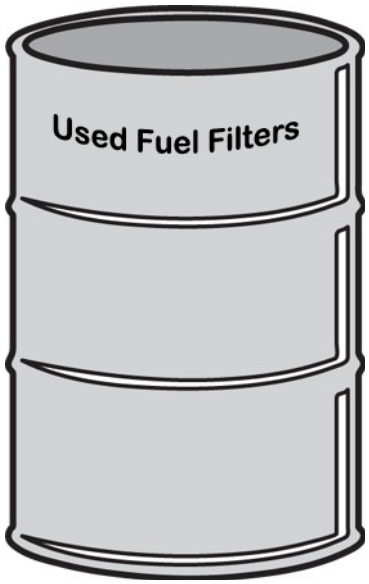
Step 1 Air dry the fuel filters and place them in an open-top drum. Obtain drums from the Fort Meade Hazardous Waste Program Manager.

Step 2 Mark container holding fuel filters with the words "Used Fuel Filters."

Step 3 Make sure containers are in the proper accumulation point within secondary containment.

Step 4 Put waste in the containers. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container or bag is closed.

Step 5 When the container is full, or sooner as needed, contact the Fort Meade Hazardous Waste Program Manager.



GENERAL INFORMATION

None.

FMMD Meade Hazardous Waste Profile Number: FGGM-18-85

FILTERS—OIL

POSSIBLE CONTAMINANTS OF CONCERN

Oil filters may contain heavy metals such as cadmium and chromium. Terne-plated oil filters contain a lead alloy. Refer to the SDS for specific hazards.

CHARACTERIZATION

Used non-terne plated oil filters free of oil are **non-hazardous solid waste.** Used **t**erne-plated oil filters, often found on large equipment, are **hazardous waste**.

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Let the oil filters drain 24 hours prior to crushing them. Collect oil filters and terne-plated oil filters separately. **Contact the Fort Meade Hazardous Waste Program manager immediately if you have a terne-plated filter.** Use an open-top drum lined with a bag to accumulate the filters.

Step 2 Mark containers holding oil filters with the words "Used Oil Filters".

Step 3 Make sure containers are in the proper accumulation point within secondary containment.

Step 4 Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 5 Crush only one filter at a time. **Turn in terne-plated oil filters immediately as a hazardous waste.**

GENERAL INFORMATION

Units/activities/tenants on FMMD are responsible for properly maintaining their oil filter crusher.

FMMD Meade Hazardous Waste Profile Number: FGGM-NR-008

FUEL—CONTAMINATED

MOGAS, JP-8, and Diesel

POSSIBLE CONTAMINANTS OF CONCERN

Unleaded gasoline (MOGAS) and JP-8 are toxic and flammable. MOGAS contains volatile organic compounds (VOCs) such as benzene, xylene, toluene, and ethylbenzene. JP-8 may contain VOCs such as benzene, toluene, trimethylbenzene, and xylene. Diesel fuel #2 consists of a mixture of "long-chain" hydrocarbons and can be a flammable liquid depending on the manufacturer and specification. Refer to the SDS for specific hazards.

CHARACTERIZATION

Fuel contaminated with antifreeze, solvents, or other chemicals must be managed as a **hazardous waste**. Depending on the chemical and the amount of the chemical mixed with the fuel will determine how to classify the waste. Call the Fort Meade Hazardous Waste Program Manager if you have concerns about your fuel.

CONTAINER MARKING AND HANDLING PROCEDURES

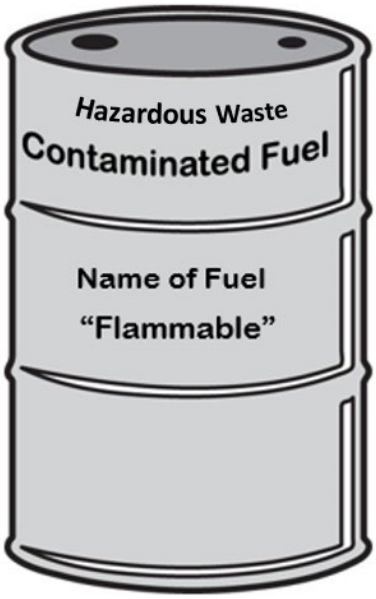
Step 1 Obtain a closed-top, UN/NA-rated, 55-gallon metal drum from the Fort Meade Hazardous Waste Program Manager. Containers must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark and label the container "Hazardous Waste: *add name of fuel*" (such as "Diesel"), "Hazardous Waste, Contaminated *name of fuel*," or "Waste *name of fuel.*" The label also needs to indicate the hazard, "Flammable."

Step 3 Make sure container is in the proper accumulation point within secondary containment.

Step 4 Put waste in the container. Wear proper PPE listed on the SDS. Ensure bung cap is placed back on the container.

Step 5 When the container becomes full, **ensuring a 4" headspace,** turn the drum in by contacting the Fort Meade Hazardous Waste Program Manager.



GENERAL INFORMATION

None.

FMMD Meade Hazardous Waste Profile Number: FGGM-18-40 Contaminated Diesel Fuel

FUEL—UNCONTAMINATED / OFF-SPECIFICATION

MOGAS, JP-8, and Diesel

POSSIBLE CONTAMINANTS OF CONCERN

Unleaded gasoline (MOGAS) and JP-8 are toxic and flammable. MOGAS contains volatile organic compounds (VOCs) such as benzene, xylene, toluene, and ethylbenzene. JP-8 may contain VOCs such as benzene, toluene, trimethylbenzene, and xylene. Diesel fuel #2 consists of a mixture of "long-chain" hydrocarbons and can be a flammable liquid depending on the manufacturer and specification. Refer to the SDS for specific hazards.

CHARACTERIZATION

Fuel with water, oil, or simply no longer needed, must be managed as a **non-hazardous industrial waste.**

CONTAINER MARKING AND HANDLING PROCEDURES

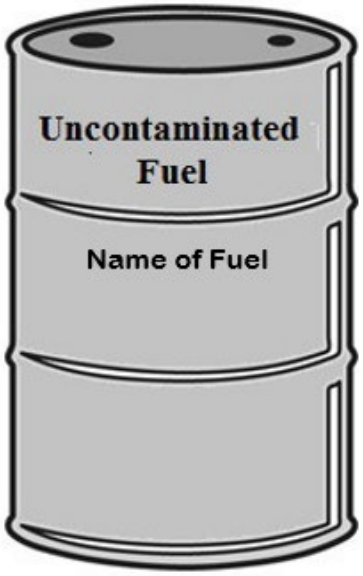
Step 1 Obtain a closed-top, UN/NA-rated, 55-gallon metal drum from the Fort Meade Hazardous Waste Program Manager. Containers must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark and label the container "Uncontaminated Fuel: Name of Fuel" before adding waste.

Step 3 Make sure container is in the proper accumulation point within secondary containment.

Step 4 Put waste in the container. Wear proper PPE listed on the SDS. Ensure bung cap is placed back on the container.

Step 5 When the container becomes full, **ensuring a 4" headspace,** turn the drum in by contacting the Fort Meade Hazardous Waste Program Manager.



GENERAL INFORMATION

The DLA-DS sells off-specification uncontaminated fuel as a material.

GAA GREASE

POSSIBLE CONTAMINANTS OF CONCERN

GAA grease contains petroleum hydrocarbons and additives. Refer to the SDS for specific hazards.

CHARACTERIZATION

Grease contaminated with dirt, water, or other materials is a **non-hazardous industrial waste** due to the petroleum constituents.

HANDLING PROCEDURES

Step 1 Turn-in unused or old GAA grease in the containers it came in as soon as it is declared a waste at the unit. Do not accumulate on site.

Step 2 Ensure that containers are marked with the contents.

GENERAL INFORMATION

None.

USED LAMPS – UNIVERSAL WASTE

Fluorescent, Mercury Vapor, Neon, Sodium, and Halogen Lamps

POSSIBLE CONTAMINANTS OF CONCERN

Small quantities of mercury, antimony, cadmium, barium, and lead are used to manufacture fluorescent lamps and high-intensity discharge (HID) lamps such as halogen, high-pressure sodium and mercury vapor lamps.

CHARACTERIZATION

All spent lamps, fluorescent and HID, are **universal wastes**.

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Lamps should be collected in the boxes they came in or in other packaging that will minimize breakage during normal handling conditions. Contact the Fort Meade Hazardous Waste Program Manager to order boxes designed specifically for waste collection and transportation.

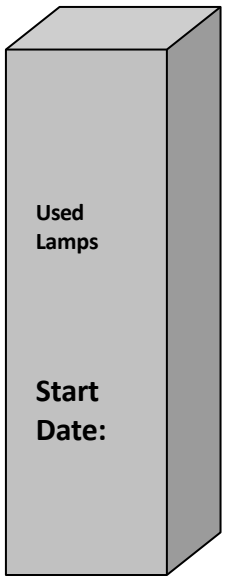
Step 2 Mark the container with the words "Used Lamps."

Write on the container the Organization/ Unit's name, phone number, and date the accumulation began.

Step 3 Make sure container is in the proper SAA.

Step 4 Put lamps in the container. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 5 Every 6 months, or when the box becomes full, whichever occurs first, turn lamps in by contacting the Fort Meade Hazardous Waste Program Manager.



GENERAL INFORMATION

All universal waste 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. Care must be taken to ensure lamps are not broken. Residue from broken lamps must be cleaned up and turned in by contacting the Fort Meade Hazardous Waste Program Manager immediately. Remember to always wear gloves when handling unbroken or broken lamps.

Hazardous waste and universal waste generator training is required for staff assigned responsibility for managing lamp accumulation points.

The Fort Meade Hazardous Waste Program Manager must be notified in writing of any lamp accumulation points that are established. Try to minimize the number of accumulation points.

Keep containers and packages of used lamps closed.

DO NOT THROW lamps in trash receptacles.

DO NOT ACCUMULATE used lamps for more than one (1) year.

FMMD Meade Hazardous Waste Profile Number: FGGM-UW-001 Fluorescent Lamps, FGGM-UW-005 HD Lamps

PAINT AND PRIMER—LATEX

POSSIBLE CONTAMINANTS OF CONCERN

Latex paints and primers contain water and small amounts of other materials (glycols, etc.) to keep the paint liquid and uniform. The water is essentially nontoxic, and the other materials are present in such small amounts that they do not present any demonstrable toxicity. Latex paints are also referred to as vinyl, acrylic, or water-based paints. Latex house paint manufactured before 1992 likely contains mercury. Latex paint manufactured before 1978 likely contains lead. Refer to the SDS for specific hazards.

CHARACTERIZATION

Latex paint and primer are most often **non-hazardous industrial waste**. Latex paint, however, depending on when it was manufactured, may contain constituents that make it hazardous. If you're not sure if it contains mercury or lead, check the label and contact the Fort Meade Hazardous Waste Program Manager. Most house paint manufactured after 1991 has no lead or mercury and is therefore non-hazardous.

Tarps, rollers, brushes, gloves, and stir sticks that have dried latex paint may be disposed in the trash.

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Turn in individual containers of latex paint or latex primer or obtain an open-top, UN/NA-rated drum (metal or poly) from the Fort Meade Hazardous Waste Program Manager for accumulating individual paint container. Drum must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark the drum with words “Used Paint and Primer-Latex”, if containing both or “Used Paint” if only containing paint, before adding any waste.

Step 3 Make sure container is in the proper accumulation point within secondary containment.

Step 4 Put the latex paint waste in the drum. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 5 When the container becomes full turn it in by contacting the Fort Meade Hazardous Waste Program Manager.

GENERAL INFORMATION

If not reused, **dried** paintbrushes, rollers, and stir sticks used to apply latex paint and primer may be disposed in the trash. **Cans that contain lead-based paint must be turned in by contacting the Fort Meade Hazardous Waste Program Manager.**

Wastewater from latex paint cleanup can be put into the sanitary sewer. Do not put into storm drains or septic systems. Where possible, reuse the wastewater by allowing solids to settle out and pouring off the water into another container. The latex solids can then be dried out and managed as latex paint waste.

FMMD Meade Hazardous Waste Profile Number: FGGM-NR-002

PAINT—NON-LATEX

Paints in Cans, Paint Booth Paint

POSSIBLE CONTAMINANTS OF CONCERN

Solvent-based paints, primer, and stains contain organic solvents such as mineral spirits, alcohols, acetates, and aliphatic solvents. Oil-based paints, primer, and stains are regulated due to their flammability and the presence of regulated solvents. They also contain regulated metals including cadmium, chromium, lead, silver, barium, mercury, arsenic, and selenium. Refer to the SDS for specific hazards. Do not discard non latex paint related items. They are considered HW for disposal.

CHARACTERIZATION

Waste oil-based paints, primers, and stains are **hazardous waste**. When cleaning up after painting, remove all **excess** paint from tarps, rollers, brushes, etc., and dispose of as hazardous waste. Tarps, rollers, brushes, gloves, and stir sticks that have dried and are no longer needed may be disposed in the trash.

CONTAINER MARKING AND HANDLING PROCEDURES

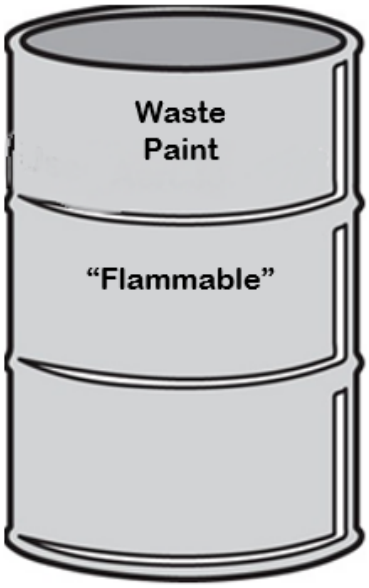
Step 1 Turn in individual containers of oil-based paint or obtain an open-top, UN/NA-rated metal drum by contacting the Fort Meade Hazardous Waste Program Manager for accumulating individual paint cans; and a closed-top UN/NA-rated metal drum for paint booth paint. Drum must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark the drum with words “Waste Paint” and the hazard, such as “Flammable” before adding any waste.

Step 3 Make sure container is in the proper SAA within secondary containment.

Step 4 Put individual cans of waste in the drum. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 5 When the container becomes full, mark the date on it and contact the Fort Meade Hazardous Waste Program Manager within 72 hours.



GENERAL INFORMATION

Do not mix different types of paints or solvents unless directed to do so by the Fort Meade Hazardous Waste Program Manager. If the manufacturer's label is missing or illegible, label the container with a description of its contents. If unsure of its contents, the product should be assumed to be solvent-based.

Store containers of paint in a well-ventilated area. Never dispose of paint or paint waste by pouring it on the ground or into a drain. Do not dry out oil-based paint containers, or spread out on cardboard to dry, etc. Never let paint containers sit open to evaporate; the fumes are toxic.

FMMD Meade Hazardous Waste Profile Number: FGGM-18-15

PAINT RELATED MATERIALS

Thinner, Primer, Stains, Varnish, Stripper, Remover, or Polyurethane

POSSIBLE CONTAMINANTS OF CONCERN

Paint thinner, stripper, or remover can be organic solvents such as mineral spirits, alcohols, acetates, and aliphatic solvents. They are regulated due to their flammability and the presence of listed solvents. Some are also corrosive and should be kept separated from the flammables. Refer to the SDS for specific hazards.

CHARACTERIZATION

Paint thinners, strippers, or removers, also called paint-related waste, are **hazardous waste**. Unless previously approved by the Fort Meade Hazardous Waste Program Manager, do not mix different types together, as violent reactions may occur.

CONTAINER MARKING AND HANDLING PROCEDURES

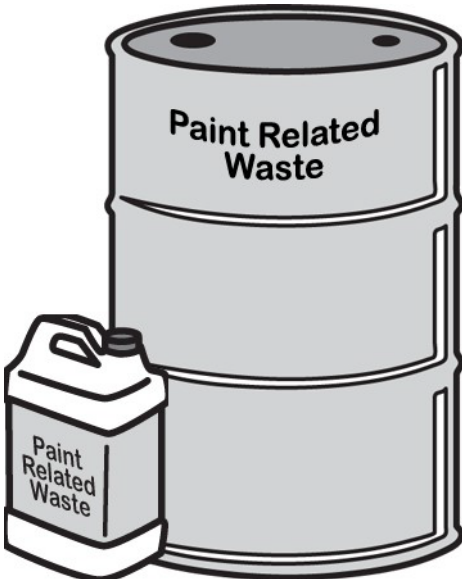
Step 1 Turn in individual containers of paint waste, unless you generate a large volume (e.g., DPW). For large volumes of paint waste, obtain a closed-top, UN/NA-rated drum by contacting the Fort Meade Hazardous Waste Program Manager. Drum must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark the container or drum with words “Paint Related Waste” before adding any waste.

Step 3 Make sure container is in the proper SAA within secondary containment.

Step 4 Put waste in the container or drum. Wear proper PPE listed on the SDS. Ensure lid is placed back on the container.

Step 5 When the container becomes full, mark the date on it and turn it in by contacting the Hazardous Waste Program Manager within 72 hours. For small containers, turn them in as soon as possible.



GENERAL INFORMATION

Never dispose of paint-related waste by pouring it on the ground or into a drain. Do not dry out containers of paint thinners, stripper, or remover, or spread out on cardboard to dry, etc. Never let paint-related waste containers sit open to evaporate; the fumes are toxic.

If the manufacturer's label is missing or illegible, label the container with a description of its contents.

Store containers of paint thinner in a well-ventilated area.

Do not accumulate flammable paint-related waste near oxidizers, corrosives, or heat sources. Corrosive paint- related materials must be separated from flammables.

FMMD Meade Hazardous Waste Profile Number: FGGM-18-16

PESTICIDES

POSSIBLE CONTAMINANTS OF CONCERN

Pesticides include insecticides, herbicides, rodenticides, and fungicides. All pesticides are toxic. Contaminants of concern vary from one pesticide to another.

CHARACTERIZATION

The Pest Management facility manages pesticides and pesticide containers in accordance with the Fort Meade Pest Management Plan. Units/activities generating pesticide containers (full, partially full, or empty) must manage them as a **hazardous waste**. Expired and other pesticides can be managed as **universal waste**.

CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Units/activities must ensure pesticide containers are labeled or marked with their contents.

Step 2 Turn in any pesticide in the boxes or containers they came in by contacting the Fort Meade Hazardous Waste Program Manager as soon as they are declared a waste at the unit. Do not accumulate on site. Ensure that boxes/containers are marked or labeled with the contents.

GENERAL INFORMATION

For significant quantities of pesticides, contact the Hazardous Waste Program Manager for specific handling procedures. Only the Pest Management facility personnel or authorized contractors are authorized to spray on Fort Meade.

FMMD Meade Hazardous Waste Profile Number: FGGM-UW-006

USED OIL—CONTAMINATED

Motor Oil, Differential Fluid, Transmission Oil, Hydraulic Oil, Gear Oil, Lubricating Oil, and Brake Fluid

POSSIBLE CONTAMINANTS OF CONCERN

Used oil potentially contains traces of metals such as chromium, cadmium, and lead. Chromium, cadmium, and lead are hazardous metals. Refer to the SDS for specific hazards.

CHARACTERIZATION

Used oil contaminated with solvents, fuels, antifreeze, or other chemicals may be hazardous and must be **managed as a hazardous waste**. Depending on the chemical and the amount of chemical mixed with the oil will determine how to classify the waste. Call the Fort Meade Hazardous Waste Program Manager if you have concerns about your oil.

CONTAINER MARKING AND HANDLING PROCEDURES

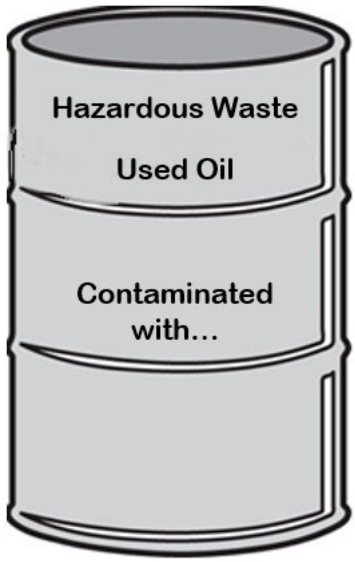
Step 1 Obtain a closed-top, UN/NA-rated, 55-gallon metal drum by contacting the HWPM. Containers must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Ensure containers are marked with the words "Hazardous Waste - Used Oil" and the contaminants, "Contaminated with…" before adding any waste.

Step 3 Make sure container is in the proper accumulation point within secondary containment.

Step 4 Put waste in the container. Wear proper PPE listed on the SDS. Ensure bung cap is placed back on the container.

Step 5 When the container becomes full, ensuring a 4" headspace, mark the date on the container and turn it in within 72 hours by contacting the HWPM.



GENERAL INFORMATION

Metalworking fluids can be managed as used oil unless they contain chlorinated compounds. If the fluids contain chlorine, they are hazardous waste. In addition, metal chips (unless they are recycled as scrap metal), sorbents, floor sweepings, and swarf that come in contact with chlorinated fluids must—like the fluids—be managed as hazardous waste.

PAG (polyalkylene glycol) oil is a lubricant waste with R134a refrigerants, mostly in automobiles. It may be a hazardous waste due to toxicity and corrosivity. Contact the Fort Meade Hazardous Waste Program Manager if disposing of PAG oil.

FMMD Meade Hazardous Waste Profile Number: FGGM-NR-025

USED OIL—UNCONTAMINATED

Motor Oil, Differential Fluid, Transmission Oil, Hydraulic Oil, Gear Oil, Lubricating Oil, and Brake Fluid

POSSIBLE CONTAMINANTS OF CONCERN

Used oil potentially contains traces of metals such as chromium, cadmium, and lead. Chromium, cadmium, and lead are hazardous metals. Refer to the SDS for specific hazards.

CHARACTERIZATION

Used petroleum-based and synthetic oils (but not vegetable- or animal-based oils) are non-hazardous industrial waste and can be recycled if not contaminated.

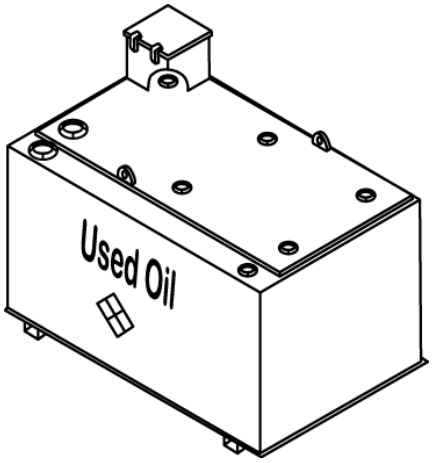
CONTAINER MARKING AND HANDLING PROCEDURES

Step 1 Place uncontaminated used oil the used oil storage tank or by contacting the Fort Meade Hazardous Waste Program Manager and obtaining a closed-top, UN/NA-rated, 55-gallon drum, if your unit does not have a Lube Cube.

Step 2 Ensure containers are marked with the words "Used Oil" before adding any waste.

Step 3 Wear proper PPE listed on the SDS. Ensure lid is closed and secured on the lube cube.

Step 4 To have the used oil storage tank pumped out, the Facility Manager places a work order for the vacuum truck. The BASOPS contractor schedules the pump out through the Hazardous Waste Program manager. If the unit does not have a used oil storage tank and the container becomes full, **ensuring a 4" headspace**, turn it in by contacting the Hazardous Waste Program Manager.



GENERAL INFORMATION

Contact the Fort Meade POL/Tanks Program Manager at 301-677-9170 or the Hazardous Waste Program Manager at 301-677-9674 for information concerning proper disposal.

Used Oil storage tanks are not to be used for the storage or placement of rainwater collected in oil collection pans (drip pans). Do not put this material in the storage tank.

No solvents or other hazardous waste can be mixed with used oil. If listed hazardous waste has been mixed with oil, the mixture must be managed as hazardous waste.

Metalworking fluids can be managed as used oil unless they contain chlorinated compounds. If the fluids contain chlorine, they are hazardous waste. In addition, metal chips (unless they are recycled as scrap metal), sorbents, floor sweepings, and swarf that come in contact with chlorinated fluids must—like the fluids—be managed as hazardous waste.

PAG (polyalkylene glycol) oil is a lubricant waste with R134a refrigerants, mostly in automobiles. It may be a hazardous waste due to toxicity and corrosivity. Contact the Hazardous Waste Program Manager if disposing of PAG oil.

FMMD Meade Hazardous Waste Profile Number: FGGM-NR-025

WEAPONS CLEANING PATCHES AND RAGS – LEAD CONTAMINATED

POSSIBLE CONTAMINANTS OF CONCERN

Weapons cleaning patches, rags, swabs, Q-tips, and pipe cleaners may be contaminated with lead residue after cleaning weapons. Lead is a toxic metal hazardous waste characteristic. The toxicity level depends on the weapon, ammunition, time between cleaning, and how long the materials have been used. The patches and rags can also become hazardous waste from the solvent or cleaner used to clean the weapons, particularly chlorinated solvents.

CHARACTERIZATION

Weapons cleaning patches and rags are considered **hazardous waste**.

CONTAINER MARKING AND HANDLING PROCEDURES

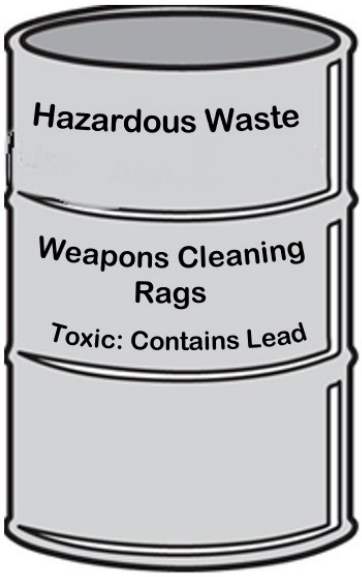
Step 1 Obtain an open-top, closeable pail or drum. The container must be clean and free from dents, bulges, excessive corrosion, and any previous markings or labels.

Step 2 Mark the container with words “Hazardous Waste” or “Waste” and “Weapons Cleaning Rags – Toxic: Contains Lead”.

Step 3 Make sure the container is placed in the proper SAA.

Step 4 Put the waste materials in the container. Wear proper PPE as listed on the SDS. Ensure the lid is in place, closed back on the container.

Step 5 When the container is full, mark the date on the container and turn it in to the Hazardous Waste facility within 72 hours by contacting the HWPM.



GENERAL INFORMATION

Only use Army approved weapons cleaning solvents, such as Cleaning Lubricant Preservative (CLP) or other Technical Manual specified substances. This helps protect you, the weapon, and the environment.

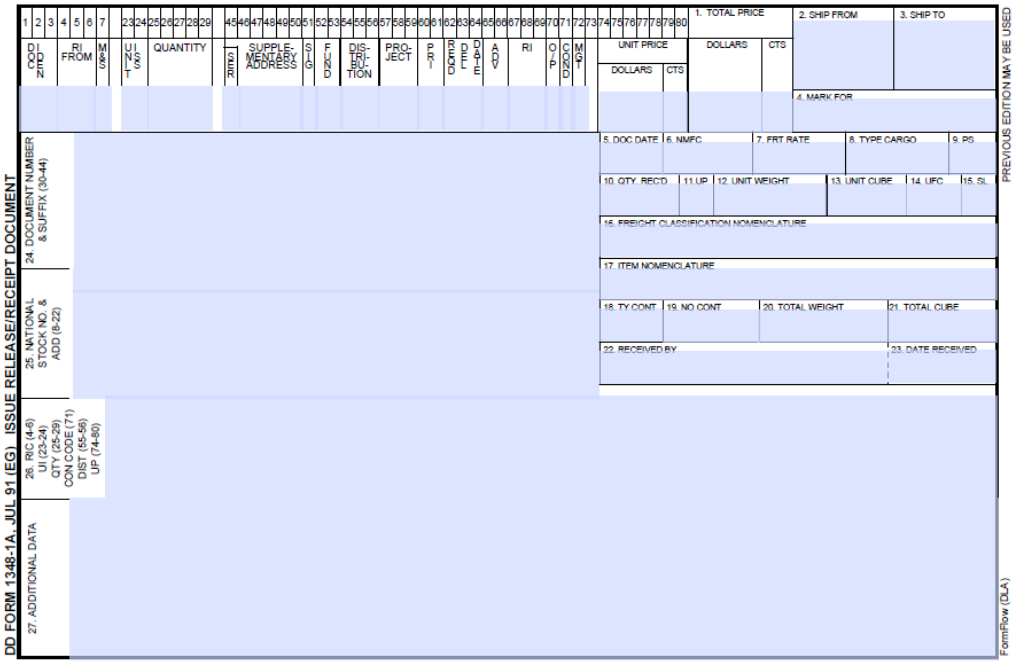
If you use chlorinated cleaning solvents to clean the weapons, the container will require additional labeling to indicate the hazards of the solvents, which may be F-Listed hazardous wastes.

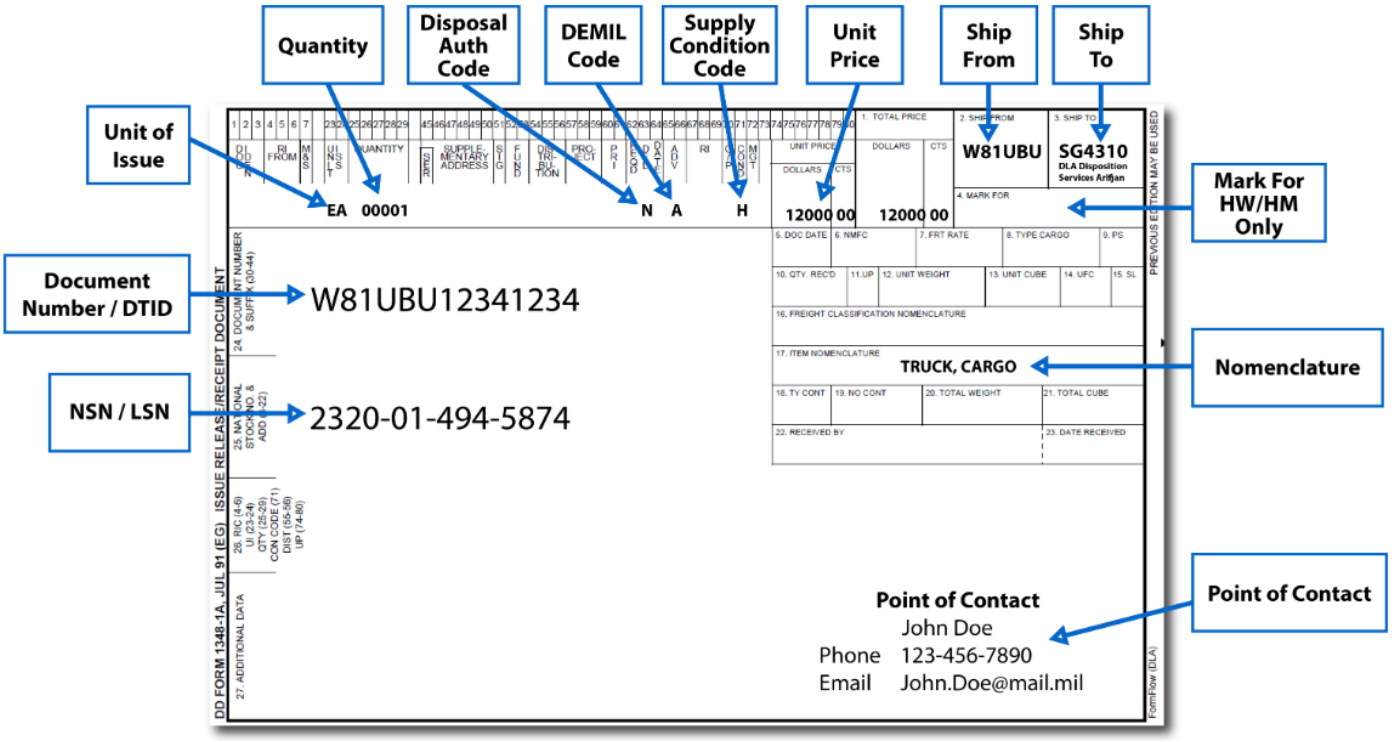
Contact the Fort Meade POL/Tanks Program Manager at 301-677-9170 or the Hazardous Waste Program Manager at 301-677-9674 for information concerning proper disposal.

FMMD Meade Hazardous Waste Profile Number: FGGM-18-8

Annex 3 – Completing a DD Form 1348-1A for Hazardous Waste

A blank DD Form 1348-1A and general instructions are provided below. A blank, fillable form and more information on completing the form is found at the following Defense Logistics Agency website, *1348-1 Help, How do I properly fill out a DD Form 1348-1A?* https://www.dla.mil/Disposition-Services/DDSR/Turn-In/1348-Help/





Turn-In Instructions for Hazardous Waste

Follow these steps to complete a DD Form 1348-1A for turning in hazardous waste.

These instructions are from Defense Logistics Agency document, *Instructions for turn in of hazardous material and waste*.
https://www.dla.mil/Portals/104/Documents/DispositionServices/Hazardous/DISP_HAZWasteTurnInInstructions_151006.pdf

a. The Department of Defense have established strict requirements regarding documentation and procedures for turning in property to the Disposition Services site.

b. All property must be accompanied by a properly prepared DD Form 1348-1A, Disposal Turn-in Document (DTID), according to DoD 4000.25-1-M, MILSTRIP. A minimum of an original and three legible copies must accompany property turned in for disposal processing. If a copy is needed for the delivery agent, an original and four legible copies must accompany the property. The following information must be provided with all turn-ins of hazardous waste:

1) "HW" in block 4 of the DD 1348-1A.

2) A valid NSN and noun name as cataloged in the supply system, or LSN/FSC and chemical name of hazardous components, if the waste is not identified by NSN (for DD 1348-1A).

3) MILSBILLS fund code (position 52-53 of the DD 1348-1A).

4) Billing DoDAAC in block 27 of the DD 1348-1A.

5) Contract Line Item Number (CLIN) in block 27 of the DD 1348-1A.

6) Total cost of disposal in block 27 of the DD 1348-1A.

7) Disposition Services site-assigned HW profile reference number in "Remarks" section, if this is not the initial turn-in of the waste stream (see paragraph C, below).

8) For non-NSN HW, the word "waste" followed by the proper shipping name in block 27, as shown in DoT 49 CFR 172.

9) For NSN HW, the word "waste" followed by proper shipping name in block 27.

   NOTE: The information required in paragraphs h and i is in addition to the information required on shipping papers.

10) Container certification statement in block 27 (see paragraph 6, below).

c. Hazardous Material: (NOTE: Per DoD direction, use DD 1348-1A or 1348-2 only for turn-in of HM.) "HM" in block 4.

d. Valid NSN and noun name as cataloged in the supply system or LSN/FSC and chemical name of hazardous components.

e. Chemical name of hazardous contaminants and noun name of non-hazardous contaminants.

f. Amounts of hazardous and non-hazardous contaminants based on user's knowledge or testing of the item expressed in a range of content (percentage by weight or ppm) as applicable.

g. MILSBILLS fund code (position 52-53).

h. Billing DoDAAC in block 27.

i. Contract Line Item Number (CLIN) in block 27.

j. Total cost of disposal in block 27.

NOTE: Used and/or opened HM that meets the definition of a HW when discarded by service contract requires a HW profile sheet in lieu of the information cited in paragraphs c and d above.

k. Container certification statement, for HM or HW, in block 27, as follows: (1) The hazardous material is packaged in containers as prescribed in the Department of Transportation CFR 49 170-189, or (2) The hazardous material is packaged in containers of equal or greater strength or efficiency as prescribed in the Department of Transportation 49 CFR 170-189.

Annex 4 – Environmental Officer Appointment Memo

Below is a sample memo for a unit to appoint an Environmental Officer.

Fort Meade Header

Date:

Form Meade (Unit/Activity):

MEMORANDUM FOR [Name]

SUBJECT: Additional Duty Appointment for Environmental Officer

1. Effective [Date] the following individual is appointed as the Environmental Officer (EO) for [Fort Meade Unit/Activity Name].

2. Authority: AR 200-1, and applicable FM's and TM's.

3. Purpose: To perform duties IAW above references.

4. Period: Until officially relieved or released from appointment or assignment.

5. Special instructions: To act as the EO liaison between [Fort Meade Unit/Activity Name] and Fort Meade DPW, Environmental Division. Become familiar with the requirements of the above referenced authority line. Receive required environmental training before commencement of EO duties. Training will be completed, with copy of training certificate and appointment letter provided to the Fort Meade Environmental Division and recorded and documented in the unit's/activity's training records. Assist Fort Meade Environmental Division personnel with the identification and implementation of solutions to mitigate environmental impacts of operations, keeping conservation and pollution prevention in mind.

[Unit Commander]

Signature Block

DISTRIBUTION:

[Unit/Activity Commander]

[Individual]

[Unit/Activity File]

Annex 5 – FMMD Inspection Forms

- Fort Meade Annual Hazardous Waste Compliance Inspection
- FMMD Unit/Activity Environmental Compliance and SAA Checklist

Fort Meade Annual Hazardous Waste Compliance Inspection

Date: _____

Name of Inspector:_____

Unit/Location and Building Number:_____

Unit/Location Point of Contact: _____

Administrative

a. Does the unit have a trained and appointed Hazardous Waste Coordinator?

b. Does the unit have a trained and appointed Environmental Coordinator/Environmental Officer?

Training

a. Is the 40-hour Hazardous Waste Initial Training completed?

b. Is the 8-hour Hazardous Waste Refresher Training completed?

FMMD HW Information Page

a. https://www.ftmeade.army.mil/directorates/dpw/environment/hazmat/index.html

b. HW information and Instruction

Controlled Hazardous Substance Storage Facility

a. What we control and manage

b. 90 day EPA storage facility

c. Large Quantity Generator (LQG)

Notifications by the Generator

a. New Waste Stream Process

b. Are Hazardous Waste Profile Sheet (HWPS) up to date and documented?

c. Is the Waste Analysis Plan up to date and implemented properly?

SOP

a. Is the Hazardous Waste Management Plan reviewed and up to date?

Inspections

a. Is the Annual Hazardous Waste Compliance Inspection completed?

b. Are the CHSSF Weekly Compliance Inspection completed?

Satellite Accumulation Areas

a. Is appropriate OSHA signage posted for workplace safety?

b. Are hazardous and non-hazardous containers labeled properly?

c. Are hazardous wastes properly stored and segregated?

Hazardous Waste Satellite Accumulation Area Weekly Inspection

Location/Bldg. #: _____

Unit: _____

Inspector/POC: _____

Date of Inspection: Phone: _____

Type of Waste: _____

	Yes	No	N/A
All HW generated is reported to Environmental Division?			
Is the SAA covered, diked, and/or bermed?			
Is incompatible HW properly contained and stored separately?			
Is there a maximum of 55 gallons of HW?			
Is there a maximum of 1 Quart of acutely HW?			
Is the SAA at or near the generation point?			
Is HW within the operator's control to prevent mixing?			
Is "Hazardous Waste" marked on the container?			
Are containers in good condition?			
Are there any leaks?			
Are containers closed except when adding or removing HW?			

Inspectors Comments

Annex 6 – Spill Prevention and Response

All personnel handling, managing, and turning in hazardous, universal, and non-hazardous waste will minimize the potential for spills and accidental releases by complying with the Fort Meade Spill Prevention, Control, and Countermeasure Plan (SPCCP) and following general spill prevention and response practices.

General Precautional Practices

The following are general practices to help minimize the potential for spills/releases:

- Avoid working with oil or hazardous substances near floor drains or sinks.
- Store materials with caps secured in order to avoid accidental spills.
- Check spill equipment inventory periodically and restock as necessary.

During an emergency, remember the following precautionary measures:

- Avoid contact with spilled materials.
- Extinguish flames with dry chemicals, foam, or carbon dioxide, as appropriate.
- Flashback along a vapor trail can occur.
- When uncertain about the contents of a spilled/released material, the MSDS will provide additional information on particular substance hazards.

Spill/Release Emergency Response Procedures

In the event of a spill or release of a potentially hazardous substance, the following emergency response procedures should be followed. Cleanup and removal of the substance(s) shall be performed only by qualified personnel as discussed in the SPCCP, Appendix G – Guidance on Cleanup Methods and Techniques.

a) IMMEDIATELY contact the Fort Meade Fire Department at Extension 2117. Information required by the Fire Department includes:

   - Name of the individual reporting the spill.
   - Location of the spill including the building number, nearest intersecting streets, and the location of the spill within the building.
   - Any known injuries and the nature of the injuries.
   - Substance spilled, including estimated rate of spilling or leaking. (Note: the SDS will provide information on the chemical contents of the spilled material.)
   - Approximate length of time since spill was initially observed.
   - Action taken prior to arrival of the Installation Response Team (IRT).

b) Notify the on-duty Supervisor regarding the incident and contact the Ft Meade Fire Department.

c) Eliminate all sources of ignition.

d) If the spilled or released material IS KNOWN NOT TO BE HAZARDOUS IN NATURE AND ATTEMPTS AT STOPPING THE SPILL SOURCE WILL NOT POSE A RISK OF PERSONAL INJURY, stop the spill source, or wait for Installation Response Team (IRT) personnel to arrive on the scene.

e) If the spilled or released material IS KNOWN NOT TO BE HAZARDOUS IN NATURE, attempt to contain and restrict the spill to the smallest area possible.

f) Isolate the area affected by the spill and deny access to unauthorized personnel.