

Chapter 2: Hazardous Materials and Hazardous Waste Management Procedure

1. Background and Purpose

This document addresses the management of hazardous materials and waste at Fort Greely Alaska (FGA). This procedure defines appropriate practices for transporting, storing, and dispensing hazardous materials, as well as, collecting any resulting waste in a safe and controlled manner in accordance with applicable U.S. Army, installation, state and federal requirements.

This procedure addresses: dispensing of hazardous materials; placement and design of dispensing, materials storage and waste accumulation areas; waste handling; inspections; training; reporting, and recordkeeping requirements. The procedure addresses three types of waste: Hazardous Waste as defined in 40 CFR 261, Universal Wastes as defined in 40 CFR 273 and Regulated Non-Hazardous Waste (oils as defined in 40 CFR 279, coolants, etc.) excluding municipal solid waste and inert debris.

2. Scope

This procedure is applicable to all Garrison departments, tenants, or contractors that: (1) store and dispense hazardous materials; (2) generate hazardous waste, universal waste, or regulated non-hazardous waste; or (3) store hazardous waste, universal waste, or regulated, non-hazardous waste.

This procedure does apply to North Haven Communities (NHC) and contractors for NHC at facilities and areas controlled by NHC, except that those provisions requiring FGAENV authorization or approval of an HMSA, SAA, HWAA, or WAA (as defined in Section 3 below) shall not apply.

This procedure does not apply to activities that Doyon Utilities or its contractors may undertake at facilities controlled by them.

3. Definitions

Hazardous Materials: Are solids, liquids, or gases that can harm people (or other living organisms), property and the environment. These materials are often subject to chemical regulations and referred to as "dangerous goods". Dangerous goods, when transported, include signage depicting whether the materials are radioactive, flammable, explosive, corrosive, oxidizing, asphyxiating, biohazardous, toxic, pathogenic, or allergenic. Hazardous materials are categorized as follows: flammable and combustible material, toxic material, corrosive material, oxidizers, aerosols, and compressed gases. A listing of hazardous materials may be found in 49 CFR 172.101.

Hazardous Material Storage Areas (HMSA): Approved locations at FGA for the storage of hazardous materials.

Hazardous Waste: Waste which because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial hazard to human health or the environment when improperly treated, stored or disposed of, or otherwise mismanaged. A waste is classified as hazardous if it exhibits a hazardous characteristic (ignitability, reactivity, corrosivity or toxicity) or is designated as a hazardous waste by the U.S. Environmental Protection Agency.

Material Safety Data Sheets (MSDS): A form that defines the properties of a given substance. Workers and emergency personnel use the information on the form to safely and responsibly work with hazardous materials. Physical data (melting point, flash point, etc.), health effects, toxicity, first aid and spill procedures, storage and disposal practices, and protective equipment requirements is provided on MSDS forms. MSDS's are designed to inform and protect workers in an occupational setting.

Satellite Accumulation Area (SAA): Established sites at FGA for the accumulation of hazardous wastes in limited quantities (not to exceed 1 quart acutely hazardous waste or 55 gallons total of other hazardous waste, except municipal solid waste, inert debris, medical waste, and asbestos, in containers at or near the point of generation) and which are under the control of the operator of the process generating the waste. There shall be a clear distinction (i.e. tape, signage, separate storage lockers, etc.) between Hazardous Materials Storage Areas (HMSA), SAAs, HWAAAs, and WAAs.

Hazardous Waste Accumulation Area (HWAA): Established sites at FGA for the accumulation of hazardous wastes, except municipal solid waste, inert debris, medical waste, and asbestos, in containers that must be labeled with the accumulation start date upon the first drop of waste entering the container. The quantity limits for HWAAAs may exceed the quantity requirements defined above for SAAs. There shall be a clear distinction (i.e. tape, signage, separate storage lockers, etc.) between HMSAs, SAAs, WAAs, and HWAAAs.

Universal Wastes (UW): Are hazardous wastes that contain mercury, lead, cadmium, copper, and other substances hazardous to human health and the environment. Common materials in this category include fluorescent tubes, batteries, electric lamps, electronic devices, and mercury-containing equipment. These products, when discarded, require specific management and disposal due to the hazardous chemicals contained in them. Universal wastes and their management is covered in 40 CFR Part 273.

Regulated Non-Hazardous Waste (Regulated NHW): Materials which by definition are not a hazardous waste, but when discarded require specific management and disposal practices (i.e. absorbent pads, oily rags, used oil and used antifreeze).

Temporary Hazardous Waste Storage Facility (THWSF): The facility maintained and operated by the Hazardous Waste Contractor to receive wastes from SAAs, HWAAAs and WAAs, consolidate the waste, and prepare the wastes for shipment. The THWSF is also an HWAA.

Waste Accumulation Area (WAA): Established sites at FGA for the accumulation of regulated non-hazardous waste (i.e. absorbent pads, oily rags, used oil and used antifreeze) or universal

wastes. HMSAs, SAAs, WAAs, and HWAAAs will be clearly identified using tape, signage, separate storage lockers, etc.

Flammable Liquid: A liquid with a flash point below 100° Fahrenheit.

4. Roles and Responsibilities

a. Garrison Commander

The Garrison Commander is the responsible official for environmental compliance at FGA. The Commander will consult regularly with FGA Environmental (FGAENV) to insure that the installation's environmental policies and procedures are properly implemented and consistent with Federal, state and Army requirements.

b. Missile Defense Agency (MDA)

The MDA and 49th Missile Defense Battalion manage operations and activities at the Missile Defense Complex (MDC). They ensure that all contractors and personnel providing services or conducting operations at the MDC comply with this procedure and any related Federal and state environmental requirements. They will promptly consult with FGAENV and/or the Garrison Commander regarding any special considerations (e.g., security) or other issues that may affect environmental compliance at the MDC.

c. FGA Department of Public Works (DPW)

The DPW Director manages all DPW activities and oversees the performance of the base operations and hazardous waste management contractors. The DPW will ensure that their activities are consistent with this procedure. DPW provides overall policy and guidance associated with environmental compliance and will consult regularly with all installation tenant organizations and departments to facilitate resolution of conflicts regarding environmental matters that cannot be resolved at lower levels. As the Garrison Commander's environmental representative, the FGA DPW will be the point of contact for interface with Federal, State, and local regulatory agencies on all environmental compliance matters associated with Garrison and tenant activities.

d. FGA Environmental Coordinator (FGAENV)

- (1) Is the primary point of contact (POC) for environmental compliance.
- (2) Submits waste exception reports to the U.S. Environmental Protection Agency (USEPA) as required.
- (3) Prepares and submits EPCRA Tier II Report to the Fire Department, Local Emergency Planning Committee, and Alaska Department of Environmental Conservation (ADEC). The report is due annually by March 1.
- (4) Monitors FGA Small Quantity Generator (SQG) status. Implements waste minimization efforts to maintain SQG status if FGA approaches limits.
- (5) If FGA exceeds the SQG limits, FGAENV will ensure necessary changes are made

to operate as a Large Quantity Generator (LQG). The change will be considered temporary for the month of LQG generation if it is determined to be an episodic event and not expected to continue into the future. LQG status requires procedural changes to the hazardous waste program as follows:

- (i) Accumulation time limit reduction from 270 days to 90 days;
 - (ii) Reduction in exception reporting from 60 days to 45 days;
 - (iii) Submission of a biennial waste report to the USEPA;
 - (iv) Preparation of a RCRA compliant contingency plan; and
 - (v) Modifications to the hazardous waste training regime at FGA.
- (6) Advise the Garrison Commander and all Directors, tenants, and contractors of environmental requirements and provides assistance in achieving compliance.
 - (7) Specifies and coordinates training with Safety Office to meet the requirements of this procedure.
 - (8) Routinely inspects hazardous material storage and dispensing areas and waste accumulation areas to include the THWSF for compliance with this procedure.
 - (9) Collaborate with hazardous materials users and waste generators on the placement of HMSAs, WAAs, SAAs, and HWAAAs and approves the location of such facilities.
 - (10) May establish an area where surplus and off-spec hazardous materials may be dropped off for reuse by other departments, tenants, or contractors at no additional cost to the user. FGAENV will establish the rules for the acceptance and dispensing of surplus and off-spec materials.
 - (11) In the event of non-compliant activities, FGAENV will seek resolution.
 - (12) Periodically implements a special household hazardous and regulated non-hazardous waste collection effort.
 - (13) Authorizes the establishment of HMSAs, SAAs, HWAAAs and/or WAAs.

e. Hazardous Waste Management Contractor (HWMC)

The HWMC is responsible for managing the collection, transportation, and temporary accumulation of Universal, Hazardous and regulated Non-Hazardous Waste, except municipal solid waste, inert debris, and medical waste, according to the requirements of this procedure, and operating the THWSF. The HWMC will work under the direction of the FGAENV to ensure compliance with this procedure. The HWMC will:

- (1) Submit a monthly summary report (due by the 10th of each month) summarizing all regulated waste collected and/or shipped from FGA during the prior month. The report shall clearly show the types and quantities of wastes received from NHC and NHC contractors.. The summary will include waste type, activity date, quantity, generator, disposal facility monthly and current annual total net weight of each waste stream, and totals of hazardous and non-hazardous waste generated.
- (2) Notify FGAENV if: (i) hazardous waste generated on site in a calendar month exceeds 75% (1650 lbs) of SQG limits (2,200 lbs); (ii) the hazardous waste accumulated on site exceeds 75% (9900 lbs) of the SQG limit of 13,200 lbs; or (iii) if any hazardous waste has been on-site for more than 90 days.
- (3) Provide waste containers and labels for HWAAAs, WAAs, and SAAs; pick up waste from HWAAAs, WAAs, and SAAs and transport to the THWSF.
- (4) Perform waste characterization sampling.

- (4) Operate and manage FGA's THWSF consistent with this procedure and applicable Army, state, and Federal regulations.
- (5) Perform weekly walk thru inspections and quarterly inspections of all HMSAs, HWAAAs, WAAs, and SAAs, and provide timely inspection reports to FGAENV.
- (6) Assist with the preparation of manifest forms and exception reports.
- (7) Arrange for the shipment of hazardous waste and regulated non-hazardous wastes from FGA.
- (8) Perform other waste management activities as directed by FGAENV.
- (9) Provide assistance to HMSA, SAA, HWAA and/or WAA operators.

f. FGA Directorates, Departments, Tenants, North Haven Communities and Contractors will:

- (1) Properly manage hazardous materials and wastes in accordance with this procedure.
- (2) Notify FGAENV prior to establishing a HMSA, WAA, HWAA, or an SAA and obtain FGAENV's written authorization to establish and operate the area and approve the designation of primary and alternate area managers.
- (3) Designate, in writing, to FGAENV a Primary and Secondary Alternate Hazardous Waste/Materials Manager for each hazardous material dispensing/storage area and for each HWAA, WAA and SAA. A copy of the appointment letter must also be submitted to the HWMC, either delivered by hand or faxed to 873- 1008.
- (4) Notify FGAENV and the HWMC of any changes in Primary and/or Secondary Hazardous Waste/Material Manager assignments.
- (5) Maintain copies of MSDSs for all hazardous materials dispensed or stored at the dispensing/storage area or a location close to the area (within the building) where the dispensing/storage area is located. Make the MSDS readily accessible to affected area personnel and, when requested, provide to any regulatory agency inspector.
- (6) Maintain copies of waste profiles or other product information to be used in waste characterization. Provide any information to FGAENV or the HWMC as requested.
- (7) Maintain a current inventory of hazardous materials onsite. Submit a copy of the current inventory to FGAENV semi-annually. Inventories are due in the FGAENV Office by June 20th and December 20th of each year. (Attachment 1)
- (8) Notify FGAENV of the wastes being generated, especially when hazardous material usage or waste generation characteristics change.
- (9) Ensure all employees that use hazardous materials receive HAZCOM training.
- (10) Ensure all employees that manage hazardous waste attend the "Subject Matter Expert" (SME) waste management training commensurate with their duties and responsibilities.
- (11) Maintain copies of all required documents/records for 3 years. If records pertain to an employee who has separated from their position, records must still be maintained for 3 years following their separation date.
- (12) Maintain an Environmental Notebook in the immediate vicinity of any HMSA, SAA, WAA and/or HWAA. "Immediate vicinity" means at a location where the site managers (re: subparagraph (3) above) have ready access to the notebook. Below is the table of contents showing documents/records that must be kept up-to-date in the Environmental

Notebook. All documents/records will be maintained for a minimum of 3 years excluding expired Environmental Procedures.

- (i) FGA hazardous waste/materials contact list;
- (ii) FGA Environmental Procedure, Chapters 2 – Hazardous Materials and Waste Management;
- (iii) FGA Environmental Procedure, Chapter 5 – Spill Notification and Response;
- (iv) Personnel training records;
- (v) Letters of Appointment for HM & HW Managers;
- (vi) Emergency Contact List;
- (vii) Updated/Accurate Hazardous Materials Inventory;
- (viii) Container Logs/ Receipt of Hazardous Waste, Universal or Non-Regulated Waste picked up by the HW contractor;
- (ix) Weekly HMSA inspection report;
- (x) Weekly Waste inspection report
- (xi) Quarterly HWMC Hazardous Waste & Materials Compliance Inspection Report
- (xii) Facility Site Map / Floor Plan;
- (xiii) FGAENV authorization letter for the SAA, HWAA, WAA or HMSA;

5. Operations

a. General Requirements for Hazardous Material Storage and Dispensing

This section applies to hazardous materials storage and dispensing. Each department, tenant, and contractor is responsible for following the operational requirements of this section.

(1) A hazardous materials storage area includes all hazardous material cabinets, drum dispensing, or areas designed to dispense or store hazardous materials and meeting the following volume requirements:

- (i) Areas that contain less than five gallons (or 40 pounds) of office or cleaning chemicals will not be considered a hazardous materials dispensing/storage area.
- (ii) Areas containing more than 5 gallons (or 40 pounds), but less than 55 gallons (or 400 pounds) of any hazardous material will be considered a hazardous material dispensing/storage area unless otherwise designated by FGAENV.
- (iii) Areas containing more than a total of 55 gallons (or 400 pounds) of any hazardous material or any amount of an extremely hazardous substance, as defined in 40 CFR 355 (Appendix A or B), or any amount of an acutely toxic chemical, as defined in 40 CFR 261.33(e), will be considered a hazardous material dispensing/storage area.

(2) FGAENV will approve storage locations and specify labeling and signage requirements for hazardous material dispensing/storage areas. FGAENV will coordinate with the Fort Greely Fire Department for quantity limitations, fire extinguisher positioning, eye wash/shower station placement, bonding and grounding, communications, floor plans, evacuation routes and other requirements. FGAENV's written authorization to establish and operate a HMSA is required.

(3) HMSA Facility and Operation Standards

- (i) Signage must include, but is not limited to, emergency contact phone numbers, spill response procedures, warnings appropriate to the materials being stored and restrictions for entry.
- (ii) Adequate ventilation must be provided for all areas that store or dispense flammable or combustible materials.
- (iii) Stock shall be managed on a first-in first-out rotation and levels should not exceed reasonable operational needs. New products shall be segregated from in-use containers.
- (iv) Flammable liquids shall not be dispensed into containers unless the nozzle and container are bonded properly.
- (v) Secondary containment must be provided for all containers ≥ 55 gallons from which liquid hazardous materials are dispensed/stored. Impervious flooring with curbing, storage cabinets, spill-pallets, and over-pack containers are examples of suitable secondary containment. Flammable lockers not capable of containing 110% volume but that are located inside a building with impervious flooring, curbing, and no drain in the near vicinity will be evaluated on a case by case basis.
- (vi) Incompatible materials shall be segregated in such a way that spilled material from one container may not contact the drip pan or surface of the incompatible material. Incompatible materials include flammables with corrosives or oxidizers, poisons with corrosives, and caustics with acids.
- (vii) The preferred method of dispensing is by pumps from vertical drums. Facility managers shall provide drip pans for materials dispensed from horizontally placed drums. Facility managers shall inspect drip pans daily and empty contents into appropriate waste containers when free liquids, including rainwater, are detected in the pans.
- (viii) Damaged, leaking, surplus, expired or off-spec hazardous materials that cannot be used in a timely fashion shall be managed as Hazardous, Universal or Non-Hazardous Waste in accordance with this procedure.
- (ix) Departments, tenants, and contractors shall advise FGAENV when they have significant quantities (greater than 5 gal) of surplus, expired or off-spec materials.
- (x) Area Hazardous Waste/Materials Managers will perform weekly inspections of hazardous materials dispensing/storage areas and document their inspections. (Attachment 2)
- (xi) Reactive, corrosive, and flammable chemicals shall not be at stored in areas with unrestricted access.
- (xii) Ensure a fire extinguisher is readily accessible where flammable materials and waste are stored and that it is fully charged and the monthly inspection tag is completed.
- (xiii) Flammable/Combustible materials (DOT Hazard Class 3 or 4) must be stored in a flammable locker.
- (xiv) Keep the top of flammable lockers clear. Fire code regulations state that the top of flammable lockers must be kept clear.

(4) Container Standards

- (i) All original containers of hazardous materials shall have the manufacturers'

labeling clearly visible and new product seals shall be left in place until the product is used.

(ii) Hazardous materials transferred from the original container to another container must be marked in accordance with OSHA requirements (29CFR1910.112) with the manufacturer's name, product name, hazard identifiers (flammable, corrosive, etc.,) and the appropriate hazard warnings.

(iii) Empty containers previously containing hazardous materials ≥ 5 gallons must be marked "EMPTY".

(iv) Facility managers shall keep the tops and sides of containers clean and closed (more than finger tight) when not in use.

(v) Spill Prevention and Response

(A) Facility personnel shall immediately respond to spills and provide notification in accordance with the Spill Response and Notification Procedures provided in Chapter 5 of the FGA Environmental Procedures.

(B) Facility managers shall maintain and store an adequate quantity of spill response supplies (pads, booms, absorbent, salvage drum, etc.) to contain the worst-case spill scenario at or near the dispensing site.

(C) Facility managers shall immediately replace damaged, dented or rusty containers that leak or may leak because of their condition. Promptly replace leaky spigots.

(D) Facility managers shall ensure all appropriate personal protective equipment (i.e. gloves, boots, aprons, goggles, respirators) is stored nearby.

(E) Facility managers shall ensure all drains to the sewage system are identified and have spill plugs/booms available in the event of a hazardous material spill.

b. General Requirements for Waste Management

This section applies to the accumulation and on-site movement of universal, hazardous and non-hazardous waste, except municipal solid waste, inert debris, medical waste, and asbestos. Each department, tenant, contractor and HWMC is responsible for following the operational requirements of this section.

(1) An accumulation area includes all waste storage cabinets, drums, containers, vessels or areas set up to accumulate limited amounts of hazardous, non-hazardous and universal waste. Any area that accumulates hazardous waste, in any quantity, is considered a waste accumulation area subject to the requirements outlined in this procedure. Determinations are made based on the following criteria. Waste accumulation areas must be differentiated from other shop activities.

(i) Areas that contain less than five gallons (or 40 pounds) of non-hazardous or universal waste will not be considered an accumulation area unless so designated by FGAENV.

(ii) Areas containing greater than 5 gallons (or 40 pounds), but less than 55 gallons (or 400 pounds) of non-hazardous or universal waste will be considered an WAA unless otherwise designated by FGAENV.

(iii) All areas at or near the point of generation under the control of the operator of

the process generating the waste containing no more than 55 gallons hazardous waste (total), or 1 quart acute hazardous waste will be considered an SAA.

(iv) All areas containing greater than 55 gallons of hazardous waste (total), or greater than one quart acute hazardous waste, or an area that isn't at or near the process generating the hazardous waste, will be considered a Hazardous Waste Accumulation Area (HWAA).

(2) The generator will notify the FGAENV prior to establishing a new accumulation area, SAA, or HWAA or closing an existing accumulation area, SAA, or HWAA. FGA/ENV must authorize in writing all accumulation locations and specify labeling and signage requirements. FGAENV will coordinate with the Fort Greely Fire Department for quantity limitations, fire extinguisher positioning, eye wash shower locations, grounding/bonding, communications, floor plans, evacuation routes, and other requirements.

(3) SAA, WAA and HWAA Facility and Operation Standards

- (i) SAAs must be located at or near the work area and under the control of the operator who is generating the waste.
- (ii) Facility managers shall ensure hazardous waste amounts remain below 55 gallons, or 1 quart acute hazardous waste, for each SAA and that an accumulation start date is noted on the label when the drum is full or on the container that is holding the excess accumulation of hazardous waste when the area exceeds 55 gallons, or 1 quart acute hazardous waste.
- (iii) Facility managers shall call the FGA Hazardous Waste Management Contractor, (907) 873-1007, immediately when a hazardous waste drum is full to arrange prompt and proper transport, within 72 hours, from satellite accumulation areas. Waste from a SAA shall not be transported to another SAA.
- (iv) Facility managers shall ensure proper segregation of incompatible materials and wastes at all times. The following may not be stored or accumulated together: Flammables with corrosives or oxidizers, poisons with corrosives, caustics with acids.
- (v) Reactive, corrosive, and flammable wastes shall be at least 50 feet from areas with unrestricted access.
- (vi) Facility managers shall post signs in each SAA, WAA and/or HWAA as required by FGAENV and this procedure. The information includes emergency spill notification, updated personnel contact lists, no smoking signage, and a diagram of the area where hazardous waste and/or non-hazardous waste are stored/accumulated, and a diagram showing evacuation routes.
- (vii) Facility managers shall ensure labels and signs are clearly visible and easily read on all hazardous and non-hazardous waste accumulation areas and containers, and that the areas are clean and wastes are being collected in proper containers.
- (viii) Facility personnel shall immediately respond to spills and provide notification in accordance with the Spill Response and Notification Procedures provided in Chapter 5 of the FGA Environmental Procedures.
- (ix) Facility managers shall designate in writing a primary and secondary custodians to be responsible for each SAA, WAA and/or HWAA and provide FGAENV and the HWMC with copies of the designations. Ensure the

custodians are trained and notify FGAENV and the HWMC of any change in assigned personnel.

(x) Facility managers shall maintain and store an adequate quantity of spill response supplies (pads, booms, absorbent, etc.) to contain the worst-case spill scenario at or near the SAA, WAA and/or HWAA.

(xi) Facility managers shall segregate waste types (see Attachment 3) and never mix a known or potential hazardous waste with a non-hazardous waste.

(xii) Facility managers shall provide information as required to FGAENV or the HWMC including MSDSs and waste profile data.

(xiii) Typical wastes and their classification are provided in Attachment 3.

(xiv) Facility managers shall, prior to attempting any management, cleanup, or disposal of unknown wastes, contact FGAENV or the HWMC for information and requirements.

(xv) If drums are stored outside, they must be covered in a manner to prevent accumulation or intrusion of rain or snow and have secondary containment.

(xvi) The SAA/HWAA/WAA Manager/Alternate will perform weekly inspections of their designated SAA, WAA and/or HWAA (see Attachment 5).

(xvi) Facility managers shall ensure all appropriate personal protective equipment (i.e. gloves, boots, aprons, goggles, respirators) is stored nearby.

(xvii) Ensure a fire extinguisher is readily accessible where flammable materials and waste are stored and that it is fully charged and the monthly inspection tag is complete.

(xviii) When a ballast or electrical equipment containing dielectric fluid is removed from service it is assumed to contain polychlorinated biphenyls (PCBs) unless it has a manufacturer's label indicating "No PCBs".

(A) An Out of Service date must be clearly marked on any PCB containing item or equipment when it is removed from service.

(B) The facility manager will ensure that a legible PCB label is on all electrical equipment that contains greater than 50 ppm PCBs. The manager will ensure that the entrance to all rooms that have PCB electrical equipment has a PCB label.

(xix) For SAAs, FGAENV may, on a case-by-case basis, authorize alternate signage and facility requirements when small amounts of a single waste type (e.g., aerosol cans) are collected in the immediate area where they are generated.

(4) Container Standards

(i) The containers shall be labeled with the waste identity and a hazardous, non-hazardous, used oil, or universal waste label in accordance with 40 CFR 262.34(c)(1)(ii), 40 CFR 279, or 40 CFR 273.

(ii) Facility managers shall maintain a Container Log of all waste additions (Attachment 4). The user must log in the type, quantity, and location from where the waste was generated on the accumulation container log.

(iii) Facility managers shall assure that containers are not over-filled. (Liquids should be no more than 3 to 4 inches from the top of a 55-gallon drum, 1.5 to 2 inches from the top of a 5-gallon can, 1 inch from the top of a 1-gallon can. Soils/solids should fill no more than $\frac{3}{4}$ of container.)

- (iv) Secondary containment, capable of containing 110% of the volume of the largest container, must be provided for all liquid hazardous waste containers ≥ 5 gallons. Overpack containers are suitable secondary containment for drums.
- (v) Facility managers shall use the appropriate, compatible and properly marked/labeled accumulation containers.
- (vi) Facility managers shall collect only compatible waste in the same container.
- (vii) Incompatible wastes shall be segregated from one another or in such a way that spilled waste from one container may not contact the drip pan or container surface of another.
- (viii) Facility managers shall immediately replace damaged, dented or rusty containers that leak or may leak because of their condition.
- (ix) Facility managers shall keep containers clean on the tops and sides. Spilled wastes will be cleaned up immediately and the cleaning material properly disposed.
- (x) Facility managers shall ensure drums containing flammable liquids are properly grounded and marked with a flammable sticker.
- (xi) Facility managers shall not use overpacks, salvage drums, 85/95-gallon drums, or unapproved containers as waste receptacles.
- (xii) Facility managers shall use new or properly cleaned containers provided by the HWMC for collection of waste. Hazardous waste placed in a used container shall only be the same material as original container held.
- (xiii) Facility managers shall maintain correct labeling of wastes in accordance with guidance provided by FGAENV.
- (xiv) Facility managers shall ensure labels are clearly visible and legible at all times, facing outward, not toward the center of a pallet.
- (xv) Facility personnel shall use funnels to transfer liquids where practical to prevent spills. Funnels used to transfer flammable or volatile organic liquids shall be equipped with a spark arrestor, cover, and closure devices.
- (xvi) Facility personnel shall watch the liquid level in the container carefully and not leave containers unattended when filling (i.e., do not start a transfer pump and then leave the area).
- (xvii) Hazardous waste containers will be kept closed (more than finger tight) at all times except to add or remove hazardous waste.
- (xviii) Facility personnel shall secure proper bungs, plugs, and lids are tightly closed prior to movement of the containers on site.
- (ixx) The accumulation start date(ASD) must be clearly marked on the container. The ASD is the day the last drop of waste is added to the container for SAAs and the day the first drop of waste is added to the container for HWAAAs and universal waste.
- (xx) For containers of hazardous waste, the words "Hazardous Waste" must be clearly marked on the outside of the container.
- (xxi) For containers and/or tanks of used oil, the words "Used Oil" must be clearly marked on the outside of the container and/or tank.
- (xxii) Used oil drip pans, drain buckets and tank fill pipes must be clearly marked "Used Oil".

c. On-site Hazardous Waste Movement

The FGA HWMC is responsible for following the operational requirements of this section. The FGA HWMC shall:

- (1) Provide generators with properly labeled and appropriate waste containers as requested.
- (2) Remove hazardous waste from SAAs within 72 hours of being notified of a full container.
- (3) Move containers in a safe manner to prevent accidents and spills.
- (4) Inspect all containers prior to offsite shipment for proper packaging, labeling and condition.
- (5) Notify FGAENV whenever discrepancies involving containers or documents are noted with any shipment through the DRMO waste contractor.

d. Temporary Hazardous Waste Storage Facility (THWSF) Management

The FGA HWMC is responsible for complying with the following operational requirements. The FGA HWMC shall:

- (1) Ensure that the THWSF is sized, designed and constructed for accumulating waste covered by this procedure.
- (2) Ensure that the facility has provisions for preventing snow, ice, and rain accumulation on and under containers.
- (3) Ensure the THWSF has no drain valves, floor drains, expansion joints, sewer lines, or other openings that would allow liquids to flow out of secondary containment. Drain valves and floor drains may be present only if they can be closed or otherwise seal the secondary containment area and secured in the closed position when the secondary containment is not being actively drained.
- (4) Ensure that authorized personnel and emergency response personnel have access to the containers. The container labels must be clearly visible and legible.
- (5) Ensure that rows will be no more than two containers wide, with a minimum of three feet between rows. Aisles must allow for easy inspection of all containers for damage, leaks and spills, labels, and unobstructed movement of emergency equipment.
- (6) Ensure that if containers must be stacked (no other option exists), then stack containers only to the extent that safety is maintained. Stack drums no more than two high. Also, follow all stacking requirements of the package/container vendor.
- (7) Ensure that hazardous waste is moved off FGA property within 270 days of the accumulation start date. Universal Waste must be moved off FGA property within one year of the accumulation start date.
- (8) The HWMC will track waste quantities by type to ensure Small Quantity Generator (SQG) quantity limitations are not exceeded at any given time.
- (9) Ensure that adequate venting and ventilation is provided for all storage areas storing flammable or combustible materials.
- (10) Ensure that the facility is secured to prevent unauthorized entry or tampering with the containers.
- (11) Ensure that only materials and equipment required for consolidation, sampling,

packaging and transportation of waste are stored in the THWSF.
(12) Ensure that warning signs are posted on all sides of the THWSF perimeter and are legible from a distance of 50 feet.

(13) Ensure that evacuation routes and a waste placement plan is posted in the THWSF. Ensure that portable fire extinguishers, fire control equipment and water of adequate volume and pressure for water hoses are available at the THWSF. Ensure that personal protective equipment (*e.g.*, respirators, gloves, and safety glasses) is readily available and used by all personnel under appropriate conditions.

(14) Ensure that all waste containers received are numbered, dated, and logged into a waste management log.

(15) Ensure that waste streams are sampled if adequate process or generator knowledge does not exist or the previous sample was more than 3 years ago. Analytical results will be reviewed and profile changes will be made as necessary. In addition, changes in disposal of waste streams will be made as necessary after analytical review. All new waste streams will be tested to determine chemical profiling.

(16) Maintain tracking information on the disposition of all waste from FGA. This information includes document number, drum number, date shipped, generator, container log, manifests, exception letters and other applicable disposal documents.

6. Training

Hazardous Waste/Materials Managers and Alternates must complete and be current with FGA's Subject Matter Expert Training.

7. Surveillance

a. Department, tenant or contractor

Facility managers shall conduct daily visual inspections of dispensing and waste collection sites when in use for general housekeeping, leaks, container deterioration, or other problems. Facility managers shall conduct and document weekly inspections of any HMSAs, SAAs, HWAAAs and/or WAAs under their control.

b. HWMC

The HWMC shall conduct and document weekly inspections of the THWSF, (Attachment 5) and perform comprehensive quarterly inspections of all HMSAs, HWAAAs, SAAs, WAAs and the THWSF and provide inspection reports to FGAENV.

c. FGA Environmental Coordinator

FGAENV shall conduct frequent inspections of dispensing areas and SAAs, HWAAAs, WAAs and the THWSF. A notice of environmental deficiency may be issued by FGAENV for any

discrepancy. Organizations must correct any deficiencies within the timeframes specified by FGAENV.

8. Record Keeping

a. Department, tenant or contractor conducting governed activity

Hazardous Waste/Materials Managers of HMSAs, HWAAs, WAAs or SAAs will maintain an "Environmental Notebook" (re: Section 4.f(12)) in the immediate vicinity of the site. For co-located facilities, one notebook in the vicinity of the areas will suffice.

b. HWMC will maintain:

- (1) Copies of training records for HWMC personnel.
- (2) Container logs;
- (3) Records of each inspection;
- (4) Copies of all waste analysis and other waste determination data;
- (5) Records of waste profiles;
- (6) Copies of all waste manifests, and Letters of Exception, as applicable;
- (7) Copies of land disposal restriction certificates as required by 40 CFR 268.7;
- (8) Copies of DD Forms 1348, generated by the tracking database.

c. FGA Environmental Coordinator will maintain:

- (1) A database of all hazardous waste accumulation areas and satellite accumulation areas;
- (2) Copies of hazardous material inventories;
- (3) Copies of inspection reports and findings generated by FGAENV;
- (4) Copies of correspondence, inspection reports, and findings received from state and federal regulatory agencies and copies of all correspondence and submittals from FGA-ENV to state and federal regulatory agencies; and
- (5) Emergency contact lists.

9. Reporting

a. The FGAENV will submit the EPCRA Tier II Report to the Fire Department, Local Emergency Planning Committee, and Alaska Department of Environmental Conservation (ADEC). The report is due annually by March 1.

b. The FGAENV will submit the EPCRA Form R report, if required, to the ADEC annually by July 1.

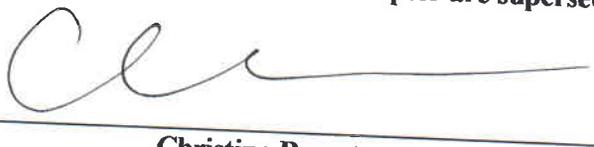
10. References

- a. 40 CFR Part 261, Identification and Listing of Hazardous Waste

- b. 40 CFR Part 262, Standards Applicable to Generators of Hazardous Waste
- c. 40 CFR Part 263, Standards Applicable to Transporters of Hazardous Waste
- d. 40 CFR Part 265, Subpart I, Use and Management of Containers
- e. 40 CFR Part 265, Subpart CC Control of Air Emissions from Containers
- f. 40 CFR Part 302, EPA Designation, Reportable Quantities, and Notification
- h. 40 CFR Part 761, Management of PCBs
- i. 49 CFR Parts 100 - 177, Subchapter C, Hazardous Materials Regulations
- j. 29 CFR Part 1910.1200, Hazard Communication
- k. AR 200-1, Environmental Protection and Enhancement

11. Approval

This procedure (Chapter 2 – Hazardous Materials and Waste Management) is hereby approved. All previous versions of this chapter are superseded and are no longer in effect.



Christine Boerst
Director
Directorate of Public Works

19 JAN 11
Date

12. Attachments

- a. Attachment 1 – Hazardous Material Inventory
- b. Attachment 2 – Weekly Hazardous Material Dispensing/Storage Area Inspection Form
- c. Attachment 3 – Identifying Hazardous Materials and Regulated Waste
- d. Attachment 4 – Container Log
- e. Attachment 5 – Weekly Waste Inspection Form
- f. Attachment 6 – Hazardous Waste and Materials Compliance Inspection

Hazardous Materials Inventory Instructions

Facility Location: Enter the building number or describe location of HMSA

Facility Manager: Enter the name of the person identified as the primary facility manager

Unit/Org: Enter the unit or organization that manages the HMSA (e.g., Boeing, 49th, CAJV)

Inventory Prepared By: Enter the name of the person preparing the inventory

Date: Enter the date that the inventory was completed

Product Name/Type: Enter the common name of the product (e.g., paint thinner, degreaser, latex paint)

Manufacturer: Enter the name of the product's manufacturer

Hazard Class: Enter the DOT hazard class (e.g., 1.3, 2.1, 8) :

Class 1: Explosives	Division 1.1 Explosives with a mass explosion hazard Division 1.2 Explosives with a projection hazard Division 1.3 Explosives with predominantly a fire hazard Division 1.4 Explosives with no significant blast hazard Division 1.5 Very insensitive explosives Division 1.6 Extremely insensitive explosive articles
Class 2: Gases	Division 2.1 Flammable gases Division 2.2 Nonflammable gases Division 2.3 Poison gas Division 2.4 Corrosive gases
Class 3: Flammable liquids.	Division 3.1 Flashpoint below -18°C (0°F) Division 3.2 Flashpoint -18°C and above, but less than 23°C (73°F) Division 3.3 Flashpoint 23°C and up to 61°C (141°F)
Class 4: Flammable solids; spontaneously combustible materials; and materials that are dangerous when wet	Division 4.1 Flammable solids Division 4.2 Spontaneously combustible materials Division 4.3 Materials that are dangerous when wet
Class 5: Oxidizers and organic peroxides	Division 5.1 Oxidizers Division 5.2 Organic peroxides
Class 6: Poisons and etiologic materials	Division 6.1 Poisonous materials Division 6.2 Etiologic (infectious) materials
Class 7: Radioactive materials	Any material, or combination of materials, that spontaneously gives off ionizing radiation. It has a specific activity greater than 0.002 microcuries per gram.
Class 8: Corrosives	A material, liquid or solid, that causes visible destruction or irreversible alteration to human skin or a liquid that has a severe corrosion rate on steel or aluminum.
Class 9: Miscellaneous	A material which presents a hazard during transport, but which is not included in any other hazard class (such as a hazardous substance or a hazardous waste).

Containers: Enter the type (e.g., drum, aerosol can, can, bottle), size (eg., 55 gal, 12 oz, 1 gallon, 1 quart), and number of containers.

MSDS: Indicate whether the product's MSDS is available and on-site (Y) or not (N).

Remarks: Provide any additional information or explanations. For example, note if a container is used for dispensing product. Also note any particular information on storage location (e.g., flammables locker #2).

NOTE: Keep this inventory up-to-date as significant changes occur in the inventory. At a minimum, the inventory must be updated semi-annually and submitted to DPW Environmental (20 June and 20 December of each year)

WEEKLY FORT GREELY HAZMAT DISPENSING/ STORAGE AREA INSPECTION FORM

Attachment Two

ORGANIZATION _____

LOCATION _____

MONTH _____

YEAR _____

Date

MATERIAL CONTAINERS		YES	NO								
Container General	Are all Containers 5 gallons or greater stored within secondary containment?										
	Are containers handled and stored to prevent rupture and /or leakage?										
	Are incompatible materials (flammable, acids, bases, reactive, and oxidizers) stored seperately?										
	Are Gas cylinders secured so they will not tip or fall with valve caps in place on cylinder that are not in use ?										
	Are flammable containers stored away from ignition sources?										
		YES	NO								
Container Condition	Are containers tightly closed, if not in use ?										
	Are containers in good condition ? (Replace damaged, dented or rusty containers)										
	Are containers free of leaks ?										
		YES	NO								
Container Marking	Are containers labeled with the product name and general hazards?										
	Are secondary use containers labeled with the product name and general hazards ?										
	Are empty containers ≥ 5 gallons that were previously used marked "empty" ?										
	Are all labels legible ?										
DISPENSING STORAGE AREA		YES	NO								
Is the area clean and spill-free ?											
Is spill response equipment adequate, compatible with materials stored, and easily accessible ?											
Are signs posted and legible (Hazardous Material Storage Area , Spill Reporting, Etc.) ?											
Are materials dispensed First In- First Out to reduce chemical waste ?											
Are material safety data sheets for all chemicals available ?											
Materials stored to prevent sliding, falling, or collapse ?											
Is storage shelving secure, in good condition, and not over-loaded or crowded ?											
Fire extinguishers located where flammable or combustible liquids are used ?											
Have expired materials been removed for appropriate disposition ?											
Inspected by											
Signature											

If any of these questions were marked No, comment and describe action taken to correct situation.

Attachment Three

IDENTIFYING HAZARDOUS MATERIALS AND REGULATED WASTE

The purpose of this section is to list by common name some of the hazardous materials and regulated waste generally found on Ft Greely, Alaska and describe how to identify and process them. Materials and wastes are discussed below in alphabetic order. This section covers materials and wastes that are frequently encountered at Ft Greely, it does not necessarily describe all materials and waste that are present or may be encountered.

"Wastes must be correctly identified, properly packaged, and correctly labeled and marked prior to pick-up by the Hazardous Waste Management Contractor (HWMC). It is imperative, prior to the scheduled pick-up day that the Hazardous Waste Contractor is notified of the type and quantity/volume of Hazardous Waste or Hazardous Materials anticipated. (If the source or parent product of the waste is well known or reasonably certain, the MSDS for that product must be submitted with the waste container). The HWMC will then provide and deliver to the facility a sufficient number of approved containers and will properly label those containers prior to on-site delivery. Contact FGA-ENV for details on packaging, labeling, and marking.

1. ABSORBENT PADS, USED

- a. **Identification.** Absorbents used in drip pans, to clean up spills, or wipe containers and equipment.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: May be FLAMMABLE or COMBUSTIBLE based on testing.
Contact the HWMC for determination.
- c. **Pollution prevention.** POL-contaminated materials must be drummed and kept separate from chemical-contaminated materials. POL-contaminated absorbent pads, rags, dry sweep and debris may be mixed in the same drum, but not with contaminated soil. There must be no free liquids in the container.
- d. **Testing.** Contact the HWMC for testing requirements.
- e. **Packaging.** POL-contaminated materials can be packaged in steel or polyethylene drums.
- f. **Special equipment.** Depends on contaminant in the absorbent.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

2. AEROSOL CANS, EMPTY, DEPRESSURIZED

- a. **Identification.** Includes aerosol cans that previously contained gaseous propellant, cleaning products, paint, enamel, lacquer, or other materials. Except for "acutely hazardous waste", aerosol cans are considered "empty" if they no longer contain more than 3 percent (%) of the original volume/net weight of contents. Aerosol cans are considered "depressurized" if the residual pressure of the contents is equal to or less than atmospheric pressure. ***Units/activities are advised NOT to attempt forced or deliberate depressurization of aerosol cans, such as punching a hole in the can, without proper approved equipment and procedures. The HWMC will depressurize aerosol cans at the Hazardous Waste Accumulation Area.***
- b. **Classification.** Prior to use/storage: Not applicable (SEE NEXT SECTION)
When disposed: Scrap Metal (when empty and depressurized)
- c. **Pollution prevention.** Use all material in the can. After each use, clean the spray nozzle by inverting the can and spraying to prevent clogging.
- d. **Testing.** None identified.
- e. **Packaging.** Contact the HWMC for requirements.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Call the HWMC to pick up and take containers to the collection point for depressurization and off-site transportation and disposal.

3. AEROSOL CANS, NOT EMPTY, PRESSURIZED

- a. **Identification.** Includes aerosol cans that previously contained compressed air (or other gaseous carrier or

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propellant), cleaning products, paint, enamel, lacquer, or other materials. Except for "acutely hazardous waste", aerosol cans are considered "empty" if they no longer contain more than 3% of the original volume/net weight of contents. Aerosol cans are considered "depressurized" if the residual pressure of the contents is equal to or less than atmospheric pressure. **Units/activities are advised NOT attempt forced or deliberate depressurization of aerosol cans such as punching a hole in the can without proper, approved equipment and procedures. The HWMC will make the determination if there is usable material remaining. If so, the material will be reused, if not, the container will be depressurized and the steel recycled.**

- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIALS; may be FLAMMABLE or COMBUSTIBLE, determined by contents.
When disposed: HAZARDOUS WASTE until recycled. Contact the HWMC for a case-specific determination.
- c. **Pollution prevention.** Use all material in the can. After each use, clean the spray nozzle by inverting can and spraying to prevent clogging.
- d. **Testing.** Contact the HWMC for a case-specific determination.
- e. **Packaging.** Contact the HWMC for requirements
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site depressurization and recycling or disposal.

4. ANTIFREEZE

- a. **Identification.** Antifreeze products (usually ethylene or propylene glycol mixtures) are typically clear, or brightly colored (e.g., bright green, orange, or red), slightly syrupy liquids.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
When disposed: HAZARDOUS WASTE PENDING ANALYTICAL RESULTS
When recycled: Depends on analytical results, if results show antifreeze as hazardous Waste then – HAZARDOUS WASTE ANTIFREEZE, FO RECYCLE. If results show as non-hazardous then – NON HAZARDOUS WASTE ANTIFREEZE FOR RECYCLE.
- c. **Pollution prevention.** Do not mix antifreeze with used oil or other petroleum products. Typically, petroleum-contaminated ethylene glycol, or used oil that is contaminated with ethylene glycol, cannot be recycled and must be disposed.
- d. **Testing.** Annual Stream verification required.
- e. **Packaging.** Waste may be stored in any UN approved container.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Used antifreeze (ethylene glycol) may be recycled at the site if recycling equipment is available.

5. ASBESTOS

- a. **Identification.** Asbestos may be present in many different products, including wall and ceiling insulation, pipe insulation, spray-on insulation, ceiling tiles, floor tiles, concrete, brake shoes, and gaskets.
- b. **Warning.** *Do not test, remove or dispose of asbestos yourself; contact FGA-ENV.* Asbestos testing, removal, packaging, and disposal must be performed by trained, certified asbestos workers. Do not perform asbestos abatement unless you are qualified and have been instructed by FGA-ENV to do so.

6. BATTERIES

- a. **Identification.** Both rechargeable and non-rechargeable, **INTACT** batteries, including lead-acid, alkaline, nickel-cadmium, and lithium.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; older lithium batteries may be FLAMMABLE.
When disposed: UNIVERSAL WASTE – USED BATTERIES, Alkaline are **Non-Hazardous Waste**, and **Lead Acid are Hazardous Material**. Do not disassemble batteries, since this often requires the parts to be managed as hazardous waste.
- c. **Pollution prevention.** Minimize the use of batteries by using electrically powered equipment or rechargeable batteries, when possible. Do not disassemble the batteries, since this eliminates some recycling opportunities.

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- d. **Testing.** None identified.
- e. **Packaging.** DOT-approved container. Tape terminal ends if there is a possibility of a short circuit.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.
- h. **Warning.** Do not break batteries open.

7. BATTERIES, BROKEN OR DISASSEMBLED PARTS

- a. **Identification.** Batteries that have been taken apart (e.g., lead-acid batteries used in motorcycles, automobiles, and trucks that have had the metal core removed). However, discharging batteries to remove the electrical charge, regenerating used batteries, disassembling battery packs to remove individual batteries or cells, removing batteries from consumer products, or removing electrolyte from batteries are not considered disassembling.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
When disposed: HAZARDOUS WASTE
- c. **Pollution prevention.** Do not disassemble the batteries, since this eliminates the opportunity to recycle them and increases the regulatory requirements.
- d. **Testing.** None identified.
- e. **Packaging.** Use plastic containers for both the lead (metal) core and battery acid, since battery acid corrodes skin, eyes, clothing, steel, and aluminum.
- f. **Special equipment.** At a minimum, wear rubber gloves and eye protection when managing lead acid batteries. A corrosive chemical-resistant apron is highly recommended. Battery acid often forms a white powder on the battery case that corrodes skin, eyes, clothing, steel, and aluminum. Keep supplies of absorbents suitable for acids in the on-site spill response equipment.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

8. BRAKE FLUID

- a. **Identification.** Brake fluid used in vehicles.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; COMBUSTIBLE
When disposed: HAZARDOUS WASTE PENDING ANALYTICAL RESULTS
When recycled: DEPENDS ON ANALYTICAL RESULTS, IF RESULTS SHOW AS HAZARDOUS WASTE, MUST STILL BE MANAGED AS HAZARDOUS WASTE UNTIL ACTUALLY RECYCLED .
- c. **Pollution prevention.** Do not mix brake fluid with antifreeze. Typically, petroleum-contaminated antifreeze, or used oil that is contaminated with antifreeze, cannot be recycled and must be disposed.
- d. **Testing.** Contact the HWMC for analytical testing. Annual stream verification is required.
- e. **Packaging.** Brake fluid can be stored in a DOT approve container.
- f. **Special equipment.** At a minimum, wear eye protection and use impermeable gloves (not cloth or leather). Brake fluid corrodes skin and eyes.
- g. **Disposal or recycling.** **Most Brake Fluids may be managed with used oil. Consult the MSDS or the HWMC for specific guidance.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

9. DRY SWEEP, CONTAMINATED

- a. **Identification.** Absorbent used in drip pans or to clean up liquid spills.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: May be FLAMMABLE or COMBUSTIBLE, determined based on testing. Contact the HWMC for determination.
- c. **Pollution prevention.** None identified.
- d. **Testing.** Contact the HWMC for testing requirements.
- e. **Packaging.** POL-contaminated materials must be drummed and kept separate from chemical-contaminated materials. POL-contaminated absorbent pads, rags, dry sweep, and debris may be mixed in the same drum, but not with contaminated soil. There must be no free liquids in the container. Chemical-contaminated materials must

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be drummed and kept separate from POL-contaminated materials. Chemical-contaminated absorbent pads, rags, dry sweep, and debris may be mixed in the same drum, but not with contaminated soil. There must be no free liquids in the container.

f. **Special equipment.** Depends on contaminant in the absorbent.

g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

10. DRY SWEEP, UNUSED

a. **Identification.** Dry sweep material that has not been used or contaminated.

b. **Classification.** Prior to use/storage: Not applicable
When disposed: NON-HAZARDOUS WASTE

c. **Pollution prevention.** Give unused dry sweep to another unit/activity for use in their operations.

d. **Testing.** None identified.

e. **Packaging.** None identified.

f. **Special equipment.** None identified.

g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

11. EMPTY CONTAINERS

a. **Identification.** A container is considered empty when all material has been removed according to procedures appropriate to the specific container, including pouring, pumping, or using air or hydraulic pressure.

1. For containers with a volume of less than 110 gallons:

- All material must be removed by any conventional means
- When inverted, no fluid should exit the container

2. For acutely hazardous waste in a container with a volume of less than 110 gallons:

- Acute Hazardous Wastes must be identified by FGA-ENV.
- Contents removed and container triple-rinsed.
- Triple rinsates must be treated as a Hazardous Waste and collected, contained, labeled, and marked appropriately for pick-up and disposal.

b. **Classification.** Prior to use/storage: Not applicable
When disposed: NON-HAZARDOUS WASTE

c. **Pollution prevention.** Emptied containers in good, serviceable condition may be reused (only with compatible material) for purposes OTHER THAN for storage of Hazardous Waste.

d. **Testing.** None identified.

e. **Packaging.** None identified.

f. **Special equipment.** At a minimum, wear eye protection when emptying a container.

g. **Disposal or recycling.** Contact the HWMC for direction.

12. EXPLOSIVES

a. **Identification.** Explosives include ammunition, shells, gunpowder, plastic explosives, and other materials.

b. **Warning.** Do not attempt to manage explosive materials.

c. **Reference.** Information on explosive materials management is not provided in this regulation. Contact Explosive Ordnance Disposal (EOD) for explosive materials management procedures.

13. FLUORESCENT LIGHT BALLAST

a. **Identification.** Ballast associated with fluorescent lights.

b. **Classification.** Prior to use/storage: Not applicable
When disposed: Pre-1978 ballast – PCB WASTE
Post-1978 ballast – NON-HAZARDOUS WASTE

c. **Pollution prevention.** None identified.

d. **Testing.** None identified.

e. **Packaging.** None identified.

f. **Special equipment.** None identified.

g. **Disposal or recycling.** Pre-1978 ballast: Contact the HWMC for information.
Post-1978 ballast: Must state specifically on the outer casing “Non or No PCB”

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to be disposed of as solid waste. Otherwise, they must be treated as pre-1978 ballast.

14. FLUORESCENT LIGHT BULBS AND OTHER MERCURY-CONTAINING BULBS

- a. **Identification.** Fluorescent, high-intensity discharge, neon, mercury vapor, high-pressure sodium, and metal halide light bulbs.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: UNIVERSAL WASTE –LAMPS
- c. **Pollution prevention.** Purchase long-life light bulbs and turn off lights when not needed.
- d. **Testing.** None identified.
- e. **Packaging.** Do not break light bulbs. When broken, mercury is released. Fluorescent light bulbs can be placed in their original shipping boxes or in special fluorescent light bulb bulk packaging cartons provided by the HWMC. Keep the container closed as with any other regulated waste. An accumulation start date should be placed on the container when the first bulb is placed in the box. Disposal must be completed within one year.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

15. FREON™ REFRIGERANTS

- a. **Identification.** Freon™ is used in refrigeration units and is an ozone depleting substance (ODS).
- b. **Warning.** ODS requires special handling and management. Contact the HWMC for information.
- c. **Reference.** Information on Freon™ management is not included herein. Information on Freon™ and other ODS management is provided in the Ozone-Depleting Chemicals Management Plan available from FGA-ENV.

16. FUELS

- a. **Identification.** Blazo™, butane, diesel, gasoline, home heating oil, JP-4, kerosene, methanol, propane, and Stoddard solvent.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; FLAMMABLE or COMBUSTIBLE
When disposed: HAZARDOUS WASTE
When recycled: HAZARDOUS MATERIAL FOR RECYCLING
- c. **Pollution prevention.** Use all fuel or share with other units/activities. Do not mix different fuels with each other, with used oil, with antifreeze, or with water.
- d. **Testing.** None identified.
- e. **Packaging.** Fuels can be stored in UN approved drums.
- f. **Special equipment.** Fuels are combustible or flammable. Do not store near flame or heat source.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for proper recycling or disposal.

17. GAS CYLINDERS, ACETYLENE, WITH ACETYLENE

- a. **Identification.** Full or partially full acetylene gas cylinders.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; FLAMMABLE
When disposed: HAZARDOUS WASTE
- c. **Pollution prevention.** Use all material in the cylinder. Give usable cylinders to another unit/activity for use in their operations.
- d. **Testing.** None identified.
- e. **Packaging.** DOT-approved package. The cylinder may be the DOT-approved package if properly maintained and tested.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package and label waste. Contact the HWMC for disposal procedures.

18. GAS CYLINDERS, ACETYLENE, EMPTY, DEPRESSURIZED

- a. **Identification.** Cylinders are considered empty if they are depressurized.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
When disposed: Scrap metal
When recycled: Scrap metal

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- c. **Pollution prevention.** Use all material in the cylinder.
- d. **Testing.** None identified.
- e. **Packaging.** DOT-approved package. The cylinder may be a DOT-approved package if properly maintained and tested.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package and label waste. Contact the HWMC for disposal procedures.

19. GAS CYLINDERS, GAS, EMPTY, DEPRESSURIZED

- a. **Identification.** Cylinders are considered empty if they are depressurized.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; may be FLAMMABLE or COMBUSTIBLE, depending on contents
 - When disposed: Scrap metal
 - When recycled: Scrap metal
- c. **Pollution prevention.** Use all material in the cylinder. Give usable cylinders to another unit/activity for use in their operations.
- d. **Testing.** None identified.
- e. **Packaging.** DOT-approved package. The cylinder may be the DOT-approved package if properly maintained and tested.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package and label waste. Contact the HWMC for disposal procedures.

20. GAS CYLINDERS, OTHER CONTENTS

- a. **Identification.** Gas cylinders with gas remaining in them, and cylinders above atmospheric pressure. Cylinders are considered empty if they are depressurized.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; may be FLAMMABLE or COMBUSTIBLE, depending on contents.
 - When disposed: HAZARDOUS WASTE until depressurized/recycled
- c. **Pollution prevention.** Use all material in the cylinder. Give usable cylinders to another unit/activity for use in their operations.
- d. **Testing.** Contact the HWMC for testing.
- e. **Packaging.** DOT-approved package. The cylinder may be the DOT-approved package if properly maintained and tested.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package and label waste. Contact the HWMC for disposal procedures.

21. GAS CYLINDERS, PROPANE, EMPTY, DEPRESSURIZED

- a. **Identification.** Small, empty propane cylinders used on camp stoves and lanterns. Cylinders are considered empty if they are depressurized.
- b. **Classification.** Prior to use/storage: Not applicable
 - When disposed: Scrap metal
 - When recycled: Scrap metal
- c. **Pollution prevention.** Use all material in the cylinder.
- d. **Testing.** None identified.
- e. **Packaging.** Any DOT-approved package.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and recycling.

22. GAS CYLINDERS, PROPANE, WITH PROPANE

- a. **Identification.** Propane tanks and cylinders. Cylinders are considered empty if they are depressurized.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; FLAMMABLE
 - When disposed: HAZARDOUS MATERIAL; the containers should be marked as HM and turned in to the HWMC. The HWMC will make the final determination if enough product remains to be useful. If so, it will be reused. If not, the container will be depressurized and the

Attachment Three

container will be marked as scrap metal.

- c. **Pollution prevention.** Use all material in the cylinder. Give usable cylinders to another unit/activity for use in their operations.
- d. **Testing.** None identified.
- e. **Packaging.** DOT-approved package. The cylinder may be the DOT-approved package if properly maintained and tested.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

23. HALON™

- a. **Identification.** Halon™ is found in fire extinguishers labeled as Halon™.
- b. **Classification.** Prior to use/storage: OZONE-DEPLETING SUBSTANCE
When disposed: OZONE-DEPLETING SUBSTANCE. Contact the HWMC for waste classification.
- c. **Pollution prevention.** Use fire extinguishers that do not contain Halon™.
- d. **Testing.** None identified.
- e. **Packaging.** None identified.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Identify Halon™ fire extinguishers as "waste" and label as such. Halon™ 1211, 1301, and 2402 are collected by the Defense Logistics Agency and held in a reserve for Mission Critical Requirements. Contact FGA-ENV for shipping and recycling protocols.

24. HYDRAULIC FLUID

- a. **Identification.** Hydraulic fluid used in vehicles and equipment.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
When disposed: HAZARDOUS WASTE PENDING ANALYTICAL RESULTS
When recycled: USED OIL FOR ENERGY RECOVERY OR RECYCLING
- c. **Pollution prevention.** None.
- d. **Testing.** None identified. Annual stream verification required.
- e. **Packaging.** DOT-approved package.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

25. LEAD-BASED PAINT

- a. **Identification.** Lead-based paint was used in the past on housing, tanks, metal, and wood. Surfaces painted before 1979 often contain lead-based paint.
- b. **Warning.** Do not attempt to remove lead-based paint unless you are trained in lead-based paint testing and removal and instructed by FGA-ENV to do so.

26. MEDICAL WASTE

- a. **Identification.** Medical waste consists of any bandage, towel, clothing, or other material that is contaminated with blood, urine, or feces. It also includes hypodermic needles and other sharps. Medical and infectious waste and units/activities generating these are primarily regulated under OSHA regulations rather than under "Hazardous Waste" (RCRA) regulations. Only medical/infectious waste incinerators and their performance characteristics are regulated under Hazardous Waste regulations.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: MEDICAL WASTE
- c. **Pollution prevention.** None identified.
- d. **Testing.** None identified.
- e. **Packaging.** Contact FGA-ENV for information.
- f. **Special equipment.** Contact FGA-ENV for information.
- g. **Disposal or recycling.** Never place medical waste in a trashcan, dumpster, or any other unauthorized container. Contact FGA-ENV for instructions on handling, packaging, and disposing of medical

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waste.

27. OIL FILTERS, USED, NOT TERNE-PLATED

- a. **Identification.** Use the MSDS to determine if a filter is terne-plated.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: NON-HAZARDOUS WASTE
- c. **Pollution prevention.** Use oil filters that are not terne-plated.
- d. **Testing.** None identified.
- e. **Packaging.** Used oil filters must be drained, or "hot-drained" and crushed. "Hot-drained" means the filter is drained while near engine operating temperature and above room temperature. Package drained filter separately from the used oil.
- f. **Special equipment.** At a minimum, wear eye protection and gloves.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

28. OIL FILTERS, USED, TERNE-PLATED

- a. **Identification.** Use the MSDS to determine if a filter is terne-plated.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: HAZARDOUS WASTE
- c. **Pollution prevention.** Use oil filters that are not terne-plated.
- d. **Testing.** None identified.
- e. **Packaging.** Used oil filters must be drained, or "hot-drained" and crushed. "Hot-drained" means the filter is drained while near engine operating temperature and above room temperature. Package drained filter separately from the used oil.
- f. **Special equipment.** At a minimum, wear eye protection and gloves.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

29. OILS AND GREASE

- a. **Identification.** Used lubricating oil and brake fluid drained from motorized vehicle (internal combustion) engines, generators etc. including automotive grease and non-PCB transformer oil.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
After use/during waste storage: USED OIL or (if contamination with hazardous waste is suspected) HAZARDOUS WASTE PENDING ANALYTICAL RESULTS
When disposed/recycled: USED OIL
- c. **Pollution prevention.** Do not mix used oil with any other waste). Typically, - contaminated used oil cannot be recycled and must be disposed, often as a Hazardous Waste. Special care should be exercised to avoid introducing any solvent into the oil container. It's also important not to mix with used antifreeze because again, if mixed with used antifreeze it typically can not be recycled and must be disposed of.
- d. **Testing.** Contact the HWMC for site-specific testing requirements. Annual stream verification required.
- e. **Packaging.** Any UN approved container.
- f. **Special equipment.** At a minimum, wear eye protection and use impermeable gloves.
- g. **Disposal or recycling.** Properly package, mark and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

30. PAINT, OIL-BASED OR SOLVENT-BASED

- a. **Identification.** Paint includes paint, enamel, shellac, lacquers, and varnishes. Latex paint (water-based) is not included.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL, often FLAMMABLE or COMBUSTIBLE, determined by contents.
When disposed: Determined by contents. Contact the HWMC for determination. In interim, label as HAZARDOUS WASTE PENDING ANALYTICAL RESULTS.
- c. **Pollution prevention.** Order only as much paint as necessary for the task. Share excess paint with other units/activities. If more than one person is painting, monitor the number of open cans so that multiple, partially-

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used containers do not remain at the end of the job. Do not mix paints together. Use water-based (latex paint) when possible, rather than oil-based paint.

d. **Testing.** Contact the HWMC for testing requirements.

e. **Packaging.** Close the original container. Boxes or 55-gallon drums can be used for packaging cans of paint.

f. **Special equipment.** Contact the HWMC for information.

g. **Disposal or recycling.** Do not leave oil based paints open to dry contents. Use as much of the product as possible, ensure there is no free flowing fluid in the container and dispose of empty container in trash. If residual product remains, the container must be turned in to the HWMC as Hazardous Waste. Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

31. PAINT THINNERS AND SOLVENTS

a. **Identification.** This category includes paint thinners, reducers, removers (flammable and combustible, not corrosive), solvents, and other mixed chemical paint-related products used in painting. It does not include contaminated acetone, toluene, xylene, ethanol, or other pure chemicals that are contaminated. Do not mix paint thinners and solvents together.

b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; often
FLAMMABLE or COMBUSTIBLE, determined by contents.
When disposed: HAZARDOUS WASTE

c. **Pollution prevention.** Use latex paints (water-based) when possible to eliminate the need for thinners and solvents. Remove paint by mechanical means such as scraping or sanding.

d. **Testing.** Contact the HWMC for material-specific requirements.

e. **Packaging.** Retain in the original container when possible and securely close. Multiple closed containers in good condition can be transported in boxes. These materials are combustible or flammable. Do not store near fire, flame, or a heat source.

f. **Special equipment.** At a minimum, consider using respirators and/or ventilation. Wear gloves and eye protection.

g. **Disposal or recycling.** Properly package, mark and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

32. PAINT, WATER-BASED

a. **Identification.** Water-based paints are labeled as latex paint or water-based paint.

b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
When disposed: Determined by contents.

c. **Pollution prevention.** Order only as much paint as necessary for the task. Share excess paint with other units/activities. If more than one person is painting, monitor the number of open cans so that multiple, partially used containers are not left. Do not mix paints together. Use water-based (latex paint) when possible, rather than oil-based paint.

d. **Testing.** None identified.

e. **Packaging.** Leave empty paint cans open to dry paint, then, close the paint cans. * Not applicable to flammable enamel or oil based paints.

f. **Special equipment.** None identified.

g. **Disposal or recycling.** Dried water-based paint and paint cans can be put in a dumpster or trashcan. Paint must be completely dry and have no free liquids.

33. PCBs Polychlorinated Biphenyls

a. **Identification.** Other than light ballast (see item 13 above) all PCB containing equipment exceeding 50 ppm is believed to have been removed from FGA. Contact the HWMC for any equipment containing dielectric fluid that is not clearly labeled as non-PCB.

34. PESTICIDES, HERBICIDES AND RODENTICIDES, UNUSED

a. **Identification.** This includes pesticides, herbicides, and rodenticides. Some common materials are Warfarin™, Lindane™, DDT, and 2, 4-D. Spilled pesticides, herbicides, and rodenticides are not included and must be managed as a non-routine waste (i.e., Hazardous Waste Pending Analytical Results) or managed by MSDS if accessible.

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- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
When disposed: UNIVERSAL WASTE – WASTE PESTICIDE
- c. **Pollution prevention.** Use all material or share excess with other units/activities.
- d. **Testing.** Testing is not required if the material is in its original container and retains its original label.
- e. **Packaging.** Pesticides may be stored in their original containers if they are in good condition and not leaking. This means they show no evidence of leakage, spillage or damage. Containers can be placed in a box for on-site labeling and storage. The containers must bear the original labels in readable form. Containers without intact original labels must be labeled "Waste Pesticides" and annotated with an accumulation start date and immediately turned in to the HWMC. Incompatible pesticides must not be packed in the same container.
- f. **Special equipment.** Contact FGA-ENV for information.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

35. PHOTO-DEVELOPING CHEMICALS

- a. **Identification.** Developer, fixative, and stop bath.
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; may be FLAMMABLE or COMBUSTIBLE, determined by contents.
When disposed: HAZARDOUS WASTE
- c. **Pollution prevention.** Have photos developed at a commercial photo development laboratory. Use a silver recovery unit with photo developing equipment.
- d. **Testing.** Contact the HWMC for information. Annual stream confirmation required
- e. **Packaging.** Contact the HWMC for information.
- f. **Special equipment.** Contact the HWMC for information.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

36. POL-CONTAMINATED SOIL

- a. **Identification.** Soil contaminated with POL from a spill or leak.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: Determined based on testing. Contact the HWMC for determination.
- c. **Pollution prevention.** Avoid spills and leaks.
- d. **Testing.** Contact the HWMC for determination.
- e. **Packaging.** FGA-ENV currently maintains a soil stockpile for POL contaminated soils. It is preferred that soils of this type be collected and transferred to the soil stockpile for thermal remediation. Contact the HWMC for arrangements of documentation and disposal of these soils. **Do not mix with POL-contaminated dry sweep, debris, or rags. Do not mix with any material that is chemically contaminated.**
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to arrange transfer of containers to the stockpile.

37. RADIOACTIVE MATERIALS

- a. **Identification.** Radioactive materials typically have a radioactive label attached.
- b. **Warning.** Do not attempt to manage radioactive materials. Contact FGA-ENV for information.
- c. **Reference.** Information on radioactive materials management is not included in this procedure.

38. RAGS, USED

- a. **Identification.** Rags used to wipe equipment and containers.
- b. **Classification.** Prior to use/storage: Not applicable
When disposed: HAZARDOUS WASTE PENDING ANALYSIS. May be FLAMMABLE or COMBUSTIBLE, based on contaminants. Contact the HWMC for determination
- c. **Pollution prevention.** Minimize leaks and spills.
- d. **Testing.** None identified.
- e. **Packaging.** POL-contaminated materials can be packaged in 55-gallon drums or other appropriate containers and kept separate from chemical-contaminated materials. POL-contaminated absorbent pads, rags, dry

Attachment Three

sweep, and debris may be mixed in the same drum, but not with contaminated soil. There must be no free liquids in the container. Chemical-contaminated materials must be drummed and kept separate from POL-contaminated materials. Chemical-contaminated absorbent pads, rags, dry sweep, and debris may be mixed in the same drum, but not with contaminated soil. There must be no free liquids in the container.

f. **Special equipment.** Depends on contaminant on the rag.

g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

39. SANDBLAST RESIDUE

a. **Identification.** Material generated by sandblasting (e.g., spent grit).

b. **Classification.** Prior to use/storage: Not applicable

When disposed: May be contaminated with metals, such as lead or cadmium.

c. **Pollution prevention.** Do not mix sandblast materials with other materials such as soil, debris, or rags.

d. **Testing.** Contact FGA-ENV for testing requirements. Annual confirmation required.

e. **Packaging.** Sandblast residues can be placed in any DOT approved container.

f. **Special equipment.** At a minimum, consider using an approved respirator for the specific task when handling sandblast residues.

g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

40. SOLVENTS AND DEGREASERS, CHLORINATED

a. **Identification.** Tetrachloroethane (TCE), trichloroethane (TCA), trichloroethylene (TRIC), and perchloroethylene (PERC or PCE).

b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL; may be FLAMMABLE or COMBUSTIBLE, based on material.

When disposed: HAZARDOUS WASTE

c. **Pollution prevention.** Use alternative solvent or degreaser such as *Electron Solvent* (by Ecolink, Inc.), *Daraclean 282 Solvent* (by W. R. Grace & Co.), or *PF Degreaser* (by P-T Technologies, Inc.). For NSNs of these and other acceptable replacements, call FGA-ENV.

d. **Testing.** Contact the HWMC for testing requirements. Annual confirmation sampling required.

e. **Packaging.** Solvents and degreasers can be placed in UN approved containers.

f. **Special equipment.** At a minimum, consider using a respirator, eye protection, and gloves when handling solvents and degreasers.

g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

41. SPILL RESPONSE WASTES

a. **Identification.** Spilled or leaked products, contaminated soil, and water or solvents from cleaning contaminated equipment or tools.

b. **Classification.** Prior to use/storage: May be FLAMMABLE or COMBUSTIBLE, based on material.
When disposed: HAZARDOUS WASTE PENDING ANALYTICAL RESULTS; contact the HWMC for determination

c. **Pollution prevention.** Minimize leaks and spills by maintaining equipment and containers in good condition.

d. **Testing.** Contact the HWMC for determination.

e. **Packaging.** Containerize liquids separate from solid materials.

f. **Special equipment.** Contact the HWMC for correct procedures.

g. **Disposal or recycling.** Contact the HWMC for correct procedures.

42. THERMOSTATS WITH MERCURY AMPOULE

a. **Identification.** Thermostats containing an ampoule of mercury.

b. **Classification.** Prior to use/storage: Not applicable.

When disposed: Universal Waste - Mercury Containing Equipment

c. **Pollution prevention.** Do not break ampoule and allow mercury to escape.

d. **Testing.** None identified.

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- e. **Packaging.** Any thermostat with a mercury ampoule that shows evidence of leakage, spillage, damage, or could leak in the foreseeable future, must be placed in a container. Ampoules may be removed from the thermostats as long as they are removed in a manner that will prevent breakage of the ampoule, the removal is performed over or in a containment device, and mercury spill response materials are available to immediately respond to any spill.
- f. **Special equipment.** Consider respiratory protection if mercury is not in a sealed container. Use gloves. Any mercury spilled during an operation, and the debris generated during cleanup, will be considered and must be accumulated and disposed of as Hazardous Waste.
- g. **Disposal or recycling.** Properly package and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

43. TRANSMISSION FLUID

- a. **Identification.** Transmission fluid used in vehicles and equipment (e.g., oil engine, arctic).
- b. **Classification.** Prior to use/storage: HAZARDOUS MATERIAL
When disposed: HAZARDOUS WASTE PENDING ANALYTICAL RESULTS
When recycled: HAZARDOUS WASTE PENDING ANALYTICAL RESULTS FOR RECYCLING
- c. **Pollution prevention.** None identified.
- d. **Testing.** None identified. Annual confirmation required.
- e. **Packaging.** DOT-approved package.
- f. **Special equipment.** None identified.
- g. **Disposal or recycling.** Properly package, mark, and label waste. Call the HWMC to pick up and take containers to the collection point for off-site transportation and disposal.

44. WASTES, NON-ROUTINE

- a. **Identification.** Any material or waste not identified in this section or the site-specific SOP.
Warning: Prior to attempting any management, cleanup, or disposal, contact FGA-ENV for information and requirements.
- b. **Classification.** HAZARDOUS WASTE PENDING ANALYTICAL RESULTS if unknown, Use MSDS for characterization when available.
- c. **Pollution prevention.** None identified.
- d. **Testing.** Contact the HWMC for testing requirements.
- e. **Packaging.** Contact the HWMC for packaging requirements.
- f. **Special equipment.** Contact the HWMC for requirements.
- g. **Disposal or recycling.** Contact the HWMC for requirements.

Attachment 5

WEEKLY SAA/HWAA/WAA INSPECTION RECORD

Unit/Facility: _____ Facility Type: _____ HWAA _____ SAA _____ WAA

Facility Manager: _____ Alternate: _____

Month: _____ Year: _____

		Date:									
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Notebook	Is the Notebook readily available?										
	Is the Notebook up-to-date and complete, e.g.: training records, appointment letters, current Chapters 2 and 5?										
Container Condition	Are containers tightly closed?										
	Are containers in good condition?										
	Is there secondary containment?										
Container Marking	Is the accumulation start date marked on HW containers?										
	Are the container contents clearly labeled?										
Accumulation Area	Is the area clearly marked?										
	Are container logs up-to-date?										
	Are waste properly segregated?										
	Are inappropriate waste present?										
	For SAAs, are no more than 55 gal of HW present?										
	Is the area clean and free of spilled material?										
Emergency Preparedness	Is there adequate aisle space?										
	Is there a working phone nearby?										
	Are emergency contacts posted?										
	Is there a facility and evacuation diagram?										
	Is appropriate PPE available?										
	Is spill response equipment and materials (eg, empty drum, sorbents) readily available?										
	Is there a fire extinguisher with an up-to-date tag?										
Inspected By:											
Initials											
Comments											

Attachment 6

U.S. ARMY Garrison – Fort Greely

HAZARDOUS WASTE AND MATERIALS COMPLIANCE INSPECTION CHECKLIST

1. PURPOSE:

- a. To provide a standardized checklist for Hazardous Waste and Materials Compliance Inspectors conducting field audits of unit motor pools and maintenance facilities.
- b. To assess compliance with federal, state, and U.S. Army environmental regulations.

2. APPLICABILITY: This checklist is applicable to all units, tenants and contractors assigned, attached to, or supported by the Garrison, Fort Greely, Alaska.

3. GENERAL: This inspection checklist is designed to assess environmental compliance with cited regulations and standards. Major facility categories for inspections include: waste storage areas (hazardous waste, used oil and antifreeze, universal wastes); maintenance bays; and wash racks.

4. TASK: Maintain hazardous material/regulated waste management areas to comply with federal, state, U.S. Army and Fort Greely environmental regulations and standards.

5. CONDITION: Operators of motor pools, maintenance facilities, and any other activities which store hazardous materials and generate regulated waste will self-inspect weekly for compliance with environmental regulations. These facilities will also, at a minimum, be inspected at least quarterly by the Directorate of Public Works, Environmental Division, or their contracted representative.

6. STANDARD/RATING: Facilities are rated as either: excellent, good, fair, or failing based on the following criteria:

- | | |
|------------|--|
| Failing: | One or more applicable “critical” items [indicated with a star (★) – applicable only for SAAs, HWAs and WAAs]; two or more repeat (from last quarterly inspection) unsatisfactory ratings; or five or more unsatisfactory ratings. |
| Fair: | Three or more unsatisfactory ratings; or a repeat unsatisfactory rating. |
| Good: | Less than three unsatisfactory ratings |
| Excellent: | No unsatisfactory ratings |

“Critical” items are those for which there is a specific USEPA regulatory standard that is applicable for the SAA, HWAA, WAA or THWSA.

7. REFERENCES:

- a. 49 CFR and 40 CFR
- b. AR 200-1, Solid and Hazardous Waste Management.
- c. Fort Greely Environmental Standards, Chapter 2: Hazardous Materials and Waste Management

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HAZARDOUS WASTE AND MATERIALS COMPLIANCE INSPECTION CHECKLIST		
<u>Inspector:</u>		
Name: _____ Organization: _____		
Telephone No.: _____ Date: _____ Time: _____		
<u>Unit/Organization Responsible for Facility:</u>		
<u>Designated Facility Manager and Alternate(if applicable):</u>		
Area Manager : _____ Alternate: _____		
<u>Facility Location:</u>		
<u>Facility Type:</u>		
HMSA _____ SAA _____ HWAA _____ WAA _____ Maintenance Bay _____ Wash Rack _____ Parking Lot _____		
Other (specify): _____		
<u>Materials Stored (if applicable):</u> Hazardous Materials _____ Hazardous Waste _____ Universal Waste _____		
Used Oil _____ Used Antifreeze _____ Other (specify): _____		
<u>Facility/Organization Representative(s) Present for Inspection:</u>		
<u>Weather Conditions:</u>		
<u>Inspection Results:</u>		
Overall Rating: _____ Excellent _____ Good _____ Fair _____ Fail		
Critical Items: _____ Pass _____ Fail Repeat Findings: _____ Yes _____ No		
<u>Inspector Certification:</u>		
I certify that I performed the inspection documented herein and have discussed and presented my findings to the facility representative identified below.		
_____	_____	_____
Name	Signature	Date
Additional Comments:		

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Facility Representative Acknowledgement:

I acknowledge receipt of this compliance inspection report and agree with its findings and conclusions, except as noted below.

_____ Name _____ Signature _____ Date _____

Comments:

1. PROGRAM MANAGEMENT

	SATIS-FACTORY	Applicability	UNSATIS-FACTORY
PERSONNEL APPOINTMENTS			
1.1 Are the facility's manager and alternate appointed in writing? Chapter 2, 4.f.(2,3), 4.f.(12)(v)	<input type="checkbox"/>	All	<input type="checkbox"/>
TRAINING			
1.2 Have personnel received formal training and yearly refresher training, and is documentation for the certificates for this training on file? ★ Chapter 2, 4.f.(12)(iv), 6.a-g (as appropriate)	<input type="checkbox"/>	All	<input type="checkbox"/>
HAZARDOUS MATERIAL/REGULATED WASTE SOP			
1.3 Does the unit/activity have a diagram of the area(s) where hazardous materials and regulated waste are stored? Is this diagram current? Chapter 2, 4.f.(12)(xii), 5.a.(3)(i), 5.b.(3)(vi)	<input type="checkbox"/>	All	<input type="checkbox"/>
INSPECTIONS			
1.4 Are inventories of hazardous materials recorded and up-to-date? Chapter 2, 4.f.(7) and Attachment 2	<input type="checkbox"/>	HMSA	<input type="checkbox"/>
1.5 Are weekly, inspections conducted/documentated? ★ Chapter 2, 7.a, Attachments 3,6	<input type="checkbox"/>	All	<input type="checkbox"/>
SAFETY/WASTE DETERMINATIONS			
1.6 Does the unit/activity have current MSDSs on file for hazardous materials? Chapter 2, 4.f.(5)	<input type="checkbox"/>	All	<input type="checkbox"/>
1.7 Has the unit/activity properly determined whether its wastes are regulated as hazardous wastes? ★ Chapter 2, Attachment 4	<input type="checkbox"/>	All	<input type="checkbox"/>
OTHER RECORD KEEPING REQUIREMENTS			
1.8 Does the unit/activity have a readily assessable and complete environmental notebook? Chapter 2, 4.f.(12)	<input type="checkbox"/>	All	<input type="checkbox"/>

2. HAZARDOUS MATERIALS MANAGEMENT

	SATIS-FACTORY	Applicability	UNSATIS-FACTORY
2.1 Are new products segregated from in-use containers? Chapter 2, 5.a.(3)(iii)	<input type="checkbox"/>	HMSA	<input type="checkbox"/>
2.2 Are all new product-shipping seals left in place until the product is needed? Chapter 2, 5.a.(4)(i)	<input type="checkbox"/>	HMSA	<input type="checkbox"/>
2.3 MATERIAL COMPATIBILITY. Are the following not stored together: flammables with corrosives or oxidizers; poisons with corrosives; caustics with acids? Chapter 2, 5.a.(3)(vi)	<input type="checkbox"/>	HMSA	<input type="checkbox"/>
2.4 Are flammable materials stored in a flammable material locker? Chapter 2, 5.a.(3)(xiv)	<input type="checkbox"/>	HMSA	<input type="checkbox"/>
2.5 Are hazardous materials in operating areas kept to a minimum? Are hazardous materials containers closed when not in use? Chapter 2, 5.a.(4)(iv)	<input type="checkbox"/>	HMSA	<input type="checkbox"/>
2.6 Are product containers serviceable? Are product containers labeled to identify the contents? Chapter 2, 5.4.a.(4)(ii)	<input type="checkbox"/>	HMSA	<input type="checkbox"/>
2.7 Is the material storage area(s) properly designated and marked? Chapter 2, 5.a.(3)(i)	<input type="checkbox"/>	HMSA	<input type="checkbox"/>

Attachment 6

2.8 Are containers that are stored outside covered in a manner to prevent them from becoming regulated wastes? Use Best Management Practice		HMSA	
2.9 Are spill response supplies readily available? Chapter 2, 5.a.(4)(v)(B)		HMSA	
2.10 Are there procedures to ensure stock rotation on a "first-in/first-out" (FI/FO) basis? Chapter 2, 5.a.(3)(iii)		HMSA	
2.11 Are unneeded, damaged, leaking, and excess hazardous materials and empty containers formerly holding hazardous material promptly and properly turned in? Chapter 2, page 6, 5.a.(3)(ix)		HMSA	
2.12 Are procedures in place for turn-in of excess hazardous material? Chapter 2, page 6, 5.a.(3)(x)		HMSA	

3. WASTE MANAGEMENT

	SATIS-FACTORY	Applicability	UNSATIS-FACTORY
WASTE CONTAINER REQUIREMENTS			
3.1 Are containers properly closed? Are bungs tightly closed (more than finger tight) after every use? ★ Chapter 2, 5.b.(4)(xvii-xviii)		SAA, HWAA, WAA	
3.2 Are any containers: leaking, rusted (more than surface), corroded, dented more than 2 inches? Do any containers have unserviceable filler caps/bung and/other sealing devices, any bulges, grooves other than removed metal, or dents in seams/corrugations? Are containers deteriorated in any other way? ★ Chapter 2, 5.b.(4)(viii)		SAA, HWAA, WAA	
3.3 Is container the appropriate material and construction for the waste it is holding? Chapter 2, 5.b.(4)(v)		SAA, HWAA, WAA	
3.4 Are containers not over-filled? (Liquids should be no more than 3 to 4 inches from the top of a 55-gallon drum, 1.5 to 2-inches from the top of a 5-gallon can, 1 inch from the top of a 1-gallon can. Soils/solids should fill no more than 3/4 of container.) Chapter 2, 5.b.(4)(iii)		SAA, HWAA, WAA	
CONTAINER MARKING			
3.5 Is accumulation start date marked on container(s) and storage time limits not exceeded? For SAAs, is start date put on when last drop is added to container, and the container is prepared for transport? ★ Chapter 2, 5.b.(4)(ixx)		SAA, HWAA	
3.6 Are the words "Hazardous Waste" marked on container(s) holding hazardous waste? ★ Chapter 2, 5.b.(4)(i, xx)		SAA, HWAA	
3.7 Are containers of flammable hazardous waste properly marked with a flammable sticker? Chapter 2, 5.b.(4)(x)		SAA, HWAA, WAA	
3.8 Are the words "Non-Hazardous Waste" marked on container(s) holding the non-hazardous waste? Chapter 2, 5.b.(4)(i)		WAA	
3.9 Are containers of used oil marked "Used Oil"? ★ Chapter 2, 5.b.(4)(i, xxi)		WAA	
3.10 Are used oil drip pans, drain buckets and tank fill pipes marked "Used Oil"? Chapter 2, 5.b.(4)(xxii)		WAA	
3.11 Is container(s) information properly marked? Chapter 2, 5.b.(4)(l, xiv)		SAA, HWAA, WAA	
3.12 Are all other non-applicable (old) labels painted out? Use Best Management Practices		SAA, HWAA, WAA	
3.13 Are over-pack containers labeled and marked correctly to reflect their contents? Chapter 2, 5.b.(4)(i, v)		SAA, HWAA, WAA	
WASTE AREA MANAGEMENT			
3.14 Can the storage area be differentiated from other shop activities? Chapter 2, 5.b.(3)(vi, viii)		SAA, HWAA, WAA	
3.15 Is the waste accumulation area free of severe structural deterioration?. Use Best Management Practices		SAA, HWAA, WAA	
3.16 Are there signs designating the area as a waste storage area posted on all visible sides? Do the signs correctly specify the type of waste accumulation area (e.g., SAA, HWAA, WAA)? Chapter 2, 5.b.(3)(vi, viii)		SAA, HWAA, WAA	

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3.17 Are signs stating "No Smoking Within 50 Feet" posted? Chapter 2, 5.b.(3)(v, vi)		SAA, HWAA, WAA	
3.18 At SAAs, are there no more than a total of 55 gallons of hazardous waste (or 1 quart of acutely hazardous waste) being stored? Chapter 2, 5.b.(3)(ii) ★		SAA	
3.19 Are any vents for the waste storage area unobstructed? Use Best Management Practices		SAA, HWAA, WAA	
WASTE COMPATIBILITY			
3.20 Are the following not accumulated together: flammables with corrosives or oxidizers; poisons with corrosives; caustics with acids? Chapter 2, 5.b.(3)(iv) ★		SAA, HWAA, WAA	
3.21 Is the area segregated from hazardous materials areas? Chapter 2, 5.b.(3)(vi, viii)		SAA, HWAA, WAA	
3.22 Are flammable wastes segregated from non-flammable wastes? Use Best Management Practices		SAA, HWAA, WAA	
FACILITY STANDARDS			
3.23 Does the storage area have adequate secondary containment capable of holding 110 percent of the liquid contents of the largest container? Chapter 2, 5.b.(4)(iv)		SAA, HWAA, WAA	
	SATIS-FACTORY	Applicability	UNSATIS-FACTORY
3.24 Are drums that are stored outside covered in a manner to prevent accumulation or intrusion of rain and have secondary containment? Chapter 2, 5.b.(4)(xv)		SAA, HWAA, WAA	
3.25 Are drums positioned so labels can be easily read? Chapter 2, 5.b.(4)(xiv) ★		SAA, HWAA, WAA	
3.26 Are flammable drums properly grounded? Chapter 2, 4.b.(4) (x)		SAA, HWAA, WAA	
3.27 Is adequate aisle space (3 feet) present between drums to allow unobstructed movement for emergency response? 40 CFR 264.35		SAA, HWAA, WAA	
3.28 Are container logs present for each barrel containing waste? . Chapter 2, 4.b.(4)(ii) ★		SAA, HWAA, WAA	
3.29 Is the waste storage area clean and neat? Use Best Management Practices		SAA, HWAA, WAA	
3.30 Are current personnel contacts posted at the storage area in case of an emergency? Chapter 2, 4.b.(3)(vi)		SAA, HWAA, WAA	

4. EMERGENCY PREPAREDNESS

	SATIS-FACTORY	Applicability	UNSATIS-FACTORY
4.1 Is the telephone easily accessible with emergency contacts posted in case of emergency? Is the telephone working? 40 CFR 264.34(b) ★		All	
4.2 Is there always a designated employee at the unit/activity or on call within a short distance of the unit/activity who has the responsibility for coordinating all emergency response measures? 40 CFR 262.34(d)(5)(i)		All	
4.3 Is each area marked on the Facility Site Plan? Use Best Management Practices		All	
4.4 Is an empty salvage drum nearby Chapter 2, 5.a.(4)(v)(B), 5.b.(3)(x)		All	
4.5 Are absorbent materials on hand appropriate to the wastes stored? . Chapter 2, 5.a.(4)(v)(B), 5.b.(3)(x)		All	
4.6 Is all appropriate personal protective equipment (PPE) nearby? Gloves Boots Apron Goggles Respirator (if applicable) Chapter 2, 5.a.(4)(v)(D), 5.b.(3)(xvi)		All	
4.7 Is a fire extinguisher readily accessible? Is the fire extinguisher fully charged? Chapter 2, 5.a.(3)(xiii), 5.b.(3)(xvii)		All	
4.8 Is an evacuation route from the storage/accumulation area identified? 40 CFR 264.52 (f)		All	
4.9 Do personnel working with hazardous materials/regulated wastes know the locations of MSDSs and safety precautions for the materials/regulated wastes? Chapter 2, 4.f(5)		All	
4.10 Is an evacuation route from the storage/accumulation area identified? 40 CFR 264.52 (f)		All	

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5. BATTERY MANAGEMENT

	SATIS-FACTORY	Applicability	UNSATIS-FACTORY
5.1 Are spent batteries that aren't damaged, ruptured or leaking containerized in tightly closed containers and labeled "UNIVERSAL WASTE - USED BATTERIES"? Chapter 2, Attachment 3, Section 6 ★		HWAA, SAA, WAA	
5.2 Are batteries that are damaged, ruptured or leaking separated from non-damaged batteries, containerized in tightly closed containers and labeled "HAZARDOUS WASTE - USED BATTERIES"? Chapter 2, 5.b.(3)(vii)		HWAA, SAA, WAA	
5.3 Are batteries segregated by type? 40 CFR 273.13(2)(i) ★		HWAA, SAA, WAA	
5.4 Is a start date marked on each container of batteries? Chapter 2, 5.b.(4)(ixx) ★		HWAA, SAA, WAA	
5.5 Are battery accumulation time limits being met? 40 CFR 273.15 ★		HWAA, SAA, WAA	
5.6 Are batteries stored in a way that prevents possibility of leaks or rupture? Use Best Management Practices		HWAA, SAA, WAA	
	SATIS-FACTORY	Applicability	UNSATIS-FACTORY
5.7 Are MSDSs on hand for each type of battery stored? Chapter 2, 4.f(5)		HWAA, SAA, WAA	
5.8 Are waste containers compatible for the type of battery? Chapter 2, 5.b.(4)(v)		HWAA, SAA, WAA	

6. MAINTENANCE BAYS

	SATISFACTORY	UNSATISFACTORY
6.1 Are the maintenance bay floors free of POL buildup? Use Best Management Practices		
6.2 Are containers for new and used dry sweep in place and properly marked? Use Best Management Practices		
6.3 Are all personnel aware of the proper procedures for disposing of contaminated dry sweep? Chapter 2, 6.a-6.f		
6.4 Are dry sweep, rags, and other foreign matter kept out of parts washer? Use Best Management Practices		
6.5 Are parts washers used for cleaning parts only? Use Best Management Practices		
6.6 Are parts washing machines properly installed (i.e., hard-wired, vented, drains installed)? Use Best Management Practices		
6.7 Are drip pans used? Use Best Management Practices		
6.8 Are spills and leaks promptly and properly repaired and cleaned? Chapter 5		
6.10 Is the vehicle parking area free of oil spills/stained soils? Use Best Management Practices		
6.11 Are unsuitable materials, such as used oil, soap, and detergents, restricted from reaching oil/water separators, sand traps, and ditch drains? Use Best Management Practices		

7. WASH RACKS AND PARKING LOTS

	SATISFACTORY	UNSATISFACTORY
7.1 Are the wash rack areas and parking lots clean and concrete/asphalt free of POL build-up? Use Best Management Practices		
7.2 Does unit ensure hazardous solvents and unauthorized cleaners are not used on wash racks? Use Best Management Practices		

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7.3 Are all grates in place? Use Best Management Practices		
7.4 Are dumpsters free of hazardous materials/regulated waste? 40 CFR 260 Appendix 1, Figure 1		