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E18

## Safety, Health, and Environmental Standard

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**Title:** MANAGING WASTES CONTAINING CHEMICAL OR PETROLEUM PRODUCTS

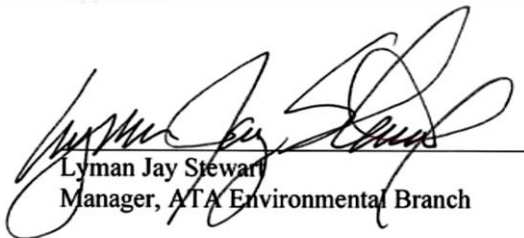
**Standard No.:** E18

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**Releasability:** There are no releasability restrictions on this publication.

The provisions and requirements of this standard are mandatory for use by all AEDC personnel engaged in work tasks necessary to fulfill the AEDC mission. Please contact your safety, industrial health and/or environmental representative for clarification or questions regarding this standard.

Approved:



Lyman Jay Stewart  
Manager, ATA Environmental Branch



Pamela F. King  
Chief, Asset Management Section  
AEDC/TSDCA

## Record of Review/Revision

(Current revisions are highlighted in yellow and marked with a vertical line in the right margin.)

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# Safety, Health, and Environmental Standard

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## MANAGING WASTES CONTAINING CHEMICAL OR PETROLEUM PRODUCTS

### 1.0 INTRODUCTION/SCOPE/APPLICABILITY

- 1.1 Most operations conducted at AEDC utilize a variety of chemical or petroleum products that may generate wastes once the products are no longer needed. In addition to these wastes, this standard also applies to other wastes that may be contaminated with chemical or petroleum products. The Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) have promulgated regulations to ensure that the workforce, work area, and the environment are protected from the potentially harmful effects of these wastes. This standard implements the program for management of wastes containing chemical or petroleum products that are generated, handled, or disposed of by military, civilian, or contractor staff conducting work at AEDC.
- 1.2 This standard is used to supplement guidance given in the following documents: *40 CFR 260-272, Resource Conservation and Recovery Act (RCRA)*; *AFI 32-7042, Waste Management*; *AEDC Hazardous Waste Management Plan*; and *the AEDC RCRA-Part B Treatment, Storage, and Disposal (TSD) Permit*.
- 1.3 This standard does not apply to normal refuse such as janitorial supplies commonly used in homes (except large quantities) or debris from construction or demolition activities. Cured adhesives, plastics, and paper wastes may be treated as normal refuse unless contaminated by chemical or petroleum products. Although compressed gas cylinders are turned in to Logistics Support, those that will no longer be returned to the vendor, and therefore require disposal as a waste, should comply with this standard even if containing inert or low toxicity industrial gases (such as oxygen, nitrogen, argon, helium, or carbon dioxide). Wastes that are managed by other standards include asbestos, explosives, and polychlorinated biphenyls (PCBs). [See *AEDC Safety, Health and Environmental (SHE) Standards D11, Ionizing Radiation*; *E7, Asbestos*; *E15, Explosives Safety*; and *E16, Polychlorinated Biphenyls*.]

### 2.0 BASIC HAZARDS/HUMAN FACTORS

The wastes covered by this standard may be ignitable, corrosive, reactive, toxic, or otherwise directly hazardous to humans. If spilled or improperly disposed of, the wastes may pose hazards to people, facilities, or the environment and lead to regulatory enforcement actions against AEDC.

### 3.0 DEFINITIONS

Accumulation—The act of depositing hazardous waste to amass and grow without permit requirements but with either a 55-gallon limit or a 90-day limit.

Accumulation Site (ACCS) (90-day)—A designated area where chemical wastes and/or petroleum wastes may be accumulated (for no more than 90 days if the material qualifies as hazardous waste). A state permit is not required.

Accumulation Site Manager—The individual assigned to control waste storage at the ACCS (90-day) and conduct weekly facility and container inspections as required by regulations.

Chemical Waste—Any chemical or mixture of chemicals (solvents, cleaners, acids, caustics, refrigerants, adhesives, coolants, or other compounds) for which the user has no further need. This includes some spill residues and other hazardous materials not completely consumed in operations or processes. Based on the characteristics they exhibit, these wastes may be classified and managed as either (a) hazardous wastes as defined by RCRA and implementation regulations issued by TDEC or (b) non-hazardous wastes for which there are no proper disposal facilities in the local area.

Collection—The act of keeping a group of waste items together.

Hazardous Waste Operations Group (HWOG)—Group within Environmental Quality who provides guidance and assistance to waste generators; picks up container(s) of hazardous wastes, non-hazardous waste, spent oil suspected of being contaminated, and PCBs from waste generators; samples wastes as necessary; properly stores and inspects containers; and coordinates transportation and disposal of wastes.

Initial Accumulation Point (IAP)—An identified work site where hazardous wastes are accumulated before removal by the HWOG. This point must be at or near the site of generation and under the control of the operator of the generating process. No more than 55 gallons of hazardous waste can be stored at this location at any given time. Once this volume has been reached, the waste must be moved to an ACCS (90-day) or to the permitted Treatment, Storage, and Disposal Facility within 72 hours.

Initial Accumulation Point Manager—The individual assigned to control waste accumulation at the IAP and conduct weekly facility and container inspections as required by federal, state and Air Force regulations.

Lab Pack—Wastes, generally small quantities, in containers other than drums.

Petroleum Waste—Wastes containing fuels, hydrocarbons, or oils. Wastes containing synthetic oils are also managed as petroleum waste.

Start Date—The date a drum or other container becomes full, or when the work is complete and no more waste will be placed in the container.

Treatment, Storage, and Disposal Facility (TSDF)—A state-permitted building (Building 1456) where containers (i.e., drums and lab packs) of hazardous waste are stored and maintained at AEDC for up to a year prior to transporting to a disposal facility. AEDC does not treat or dispose of hazardous waste except by emergency permit (e.g., open detonation of unserviceable explosives).

Waste Generation Point—An identified work site where chemical or petroleum wastes are generated.

Waste Generator—An individual or organization who generates the wastes and is knowledgeable of the waste processes in which chemical or petroleum wastes are generated.

## 4.0 REQUIREMENTS/RESPONSIBILITIES

### 4.1 Requirements

#### 4.1.1 Non-Hazardous Wastes

Waste generators must follow pertinent hazardous waste procedures outlined in this standard. *Non-hazardous wastes must be labeled with a NON-HAZARDOUS WASTE label, Form GC-1747 (see ANNEX E).* Generators must follow the hazardous waste time restraints until the waste is confirmed as non-hazardous. There are no time requirements for non-hazardous waste. Whenever possible, the HWOG must be notified immediately so the container can be picked up within three days of the start date.

It is realized that some drums may have to be readied before they can be picked up. Full drums may be located in an area (e.g., basement, depressed area) where cranes must be scheduled to move the drums to grade before forklifts

can be used to transport them. But as a good management practice, all drums containing non-hazardous wastes should be readied for pickup within 90 days of the start date. Some types of non-hazardous waste (e.g., detergents, glycols, some types of oils) can turn septic after several months of storage, especially in hot areas, and begin to emit foul odors or build up pressure that could suddenly release if the drum were to be opened.

#### 4.1.2 Petroleum Waste Storage and Disposal

Prepare a Work Request for Roads and Grounds to pick up the drum(s) of spent oil and transport them to a 90-Day site where they will be managed by Environmental Quality. A Form GC-565, Waste Identification (see ANNEX C), is required for each drum or each group of drums where the oil was from the same source with the same start date. Care should be taken so as not to put other types of wastes into a **spent** oil drum. Proper segregation avoids unnecessary disposal costs. If it is suspected that the oil contains other non-RCRA regulated wastes (e.g., glycols, water or detergents), include them on the label. *Containers of spent oil must be labeled as “**Spent Oil**” on the NON-HAZARDOUS WASTE label, Form GC-1747 (see ANNEX E).*

#### 4.1.3 Container Labeling

Use of appropriate labels is mandatory at AEDC. A label must be affixed immediately upon waste being placed in the drum. The most common labels are: *HAZARDOUS WASTE* (Form GC-1749—see ANNEX D), *NON-HAZARDOUS WASTE* (Form GC-1747—see ANNEX E), *CHEMICAL HAZARD ALERT* (Form GC-1514—see ANNEX F), and *PCB WASTE*—2 labels (bottom portion only of Form GC-1749—see ANNEX D and Form GC-1748—see ANNEX G). Labels are available from the HWO, 454-3521 or 454-3628.

All bung-type drums with 55 gallons or greater capacity used to contain **spent** oil and all poly-tanks that are in service must be inspected annually. Any containers that appear incapable of containing liquid must be removed from service. Those containers passing inspection must be labeled with an *Annual Drum/Polytank Inspection* label (see ANNEX H) in accordance with **Section 4.7** of AEDC SHE Standard E11, *Oil Pollution Prevention and POL Storage Tank Management*.

Labels must be legible and complete using black indelible ink. Sharpie fine point permanent markers are preferred. If a previously-labeled drum is being reused, the previous label must be removed, completely covered, or obliterated to avoid conflicting information. All labels referenced in this section are acceptable for outdoor use. The label must be affixed to the top-third portion of the drum to prevent damage to vital information in normal handling or transporting. Labels should not be placed on top of the drum. Waste labels on drums containing spent oil or other petroleum wastes should be placed adjacent to the drum inspection labels.

#### 4.1.4 Hazardous Waste Labeling

- 4.1.4.1 AEDC provides *HAZARDOUS WASTE* labels (Form GC-1749—see ANNEX D) for hazardous waste drums and lab pack containers. Use of these labels is mandatory.
- 4.1.4.2 RCRA federal regulations require the words *HAZARDOUS WASTE* be pre-printed on the label. Sections on the label requiring additional information are explained in the following paragraphs.
- 4.1.4.3 Enter the name of the person responsible for generating the waste and his/her organization code. This person must be familiar with the waste and the operating/generating process. List the AEDC contract monitor as the generator for work done by outside contractors.
- 4.1.4.4 The contents of the drum must be entered by the person responsible for generating the waste. Common names, trade names, or chemical names must be used. If the contents are solutions or mixtures, the primary ingredient should be listed first (e.g., trichloroethylene and oil). Also, relative proportions are helpful (e.g., trichloroethylene 60%/oil 40%). In cases where it is not clear which is the principal ingredient, the generator's knowledge and judgment is **adequate**. **Samples** are collected as necessary after the drum has been taken to an ACCS (90-day) or the TSDF.

- 4.1.4.5 Waste stream numbers for drums of waste being accumulated at the IAP are provided by HWOOG personnel.
- 4.1.4.6 HWOOG enters EPA waste codes based on analytical results and/or generator knowledge any time prior to placing drums in permitted storage.
- 4.1.4.7 Enter the start date on the *HAZARDOUS WASTE* label. The date on the label must match the start date on the Form GC-565. The container must be transferred to an ACCS (90-day) or permitted storage within 72 hours of this date. *To remain in compliance with the 55-gallon and 72-hour limits, generation of more than 55 gallons must be reported immediately to the HWOOG (454-3521).*

#### 4.1.5 Non-Hazardous Waste Labeling

- 4.1.5.1 AEDC provides *NON-HAZARDOUS WASTE* labels (Form GC-1747—see ANNEX E) to be used for non-hazardous waste containers. Use of these labels is mandatory.
- 4.1.5.2 The words *NON-HAZARDOUS WASTE* are pre-printed on the label. Sections on the label requiring additional information are explained in the following paragraphs.
- 4.1.5.3 Enter the name of the person responsible for generating the waste and his/her organization code. This person should be familiar with the waste and the operating/generating process. List the AEDC contract monitor as the generator for work done by outside contractors.
- 4.1.5.4 The contents of the drum must be entered by the person responsible for generating the waste. Common names, trade names, or chemical names should be spent. If the contents are solutions or mixtures, the primary ingredient should be listed first (e.g., oil and glycol). Also, relative proportions are helpful (e.g., oil 60%/glycol 40%). In cases where it is not clear which is the principal ingredient, the generator's knowledge and judgment is adequate; laboratory analysis is not initially required. Samples are collected for analysis as necessary after the drum has been taken to an ACCS or the TSDF.
- 4.1.5.5 Enter the start date on the *NON-HAZARDOUS WASTE* label. The date on the label must match the start date on the Form GC-565. Even though start dates are not required by regulations for non-hazardous waste, some turn-ins have been found to be hazardous. Hazardous waste regulations apply to waste from the moment of generation, not from the moment of discovery. Prudence dictates that non-hazardous waste be managed with the same time limits as hazardous waste until confirmed that it is non-hazardous.

**NOTE:** Containers of material, awaiting recycling (e.g., cleaning to remove water) prior to being placed back into a system, must have a completed *NON-HAZARDOUS WASTE* label affixed to the side. Enter in the "Waste Identification" section on the label that the material is "to be recycled." However, if the material is in temporary storage only and will be placed in a system *without* any recycling activity performed, then only a completed *CHEMICAL HAZARD ALERT* label (Form GC-1514—see ANNEX F) **is required.**

#### 4.1.6 Spent Oil Drum Labeling

Even though yellow used oil drums are stenciled with the words *USED OIL ONLY*, a *NON-HAZARDOUS WASTE* label (Form GC-1747) is required and the waste type must read **Spent Oil**. Care should be taken so as not to put other types of wastes into a **spent** oil drum. Proper segregation avoids unnecessary disposal costs. If it is suspected that the oil contains other non-RCRA regulated wastes (e.g., glycols, water or detergents), include them on the label. The remainder of the label should be completed in the same manner as for non-hazardous waste (see 4.1.5, *Non-Hazardous Waste Labeling*). Also, these drums must be inspected annually, and those passing the inspection must be labeled with an annual drum/poly-tank inspection label (see 4.1.3, *Container Labeling*, and ANNEX H).

#### 4.1.7 Empty Container Labeling

Empty containers are not considered hazardous waste unless they previously contained acutely hazardous chemicals (e.g., pesticides) listed in *40 CFR 261.33(e)*. Some empty product containers may still present an environmental or safety hazard. The container must retain the label of the material that it originally held. This allows anyone needing information on the hazards to identify the contaminants. Containers that have no residue, either because they have been cleaned or are new drums that have never been used, need no label.

**NOTE:** Empty drums (e.g., product, damaged, surplus) should be turned in to Premiere Building Maintenance Corp. (PBM), 454-5329, for recycling in a timely manner. While awaiting pickup, these drums should be placed on their side so they do not collect rainwater.

#### 4.1.8 Labeling Product Drums When Original Product Becomes Waste

Excess or out-of-date chemical products turned in for waste disposal have the same labeling requirements as containers of hazardous or non-hazardous waste. If the material contained therein is a hazardous waste, affix a completed GC-1749 label to the container. If the material is a non-hazardous waste, affix a completed GC-1747 label to the top-third of the container, avoiding the top of the drum. Conflicting labels should be removed, completely covered, or obliterated to avoid conflicting information.

**NOTE:** Since the product label contains additional information that may be helpful in managing the waste, it must not be concealed or partially covered by the *HAZARDOUS / NON-HAZARDOUS WASTE* label.

#### 4.1.9 PCB Waste Labeling

4.1.9.1 PCB contamination does not make a waste RCRA hazardous waste. Other contaminants (e.g., solvents, heavy metals) which constitute a hazardous waste must be present. However, PCBs are toxic waste and require special handling and identification. If the PCB waste in the drum or lab pack container is not a RCRA hazardous waste, it must be labeled using the GC-1749 label that has the top **portion containing the words *HAZARDOUS WASTE*** (see ANNEX D) removed. All the information entries must be made as instructed for hazardous waste labeling (see 4.1.4).

4.1.9.2 Based on analytical results, if the waste contaminated with PCBs is a hazardous waste, the *HAZARDOUS WASTE* label is used. The PCB content must be noted in the waste identification section along with the information otherwise required for all hazardous waste.

4.1.9.3 An additional PCB label containing the words *CAUTION—CONTAINS PCBs* (Form GC-1748, see ANNEX G) must also be applied to all containers of PCBs.

#### 4.1.10 Unknown or Abandoned Wastes

Unlabeled containers of wastes found abandoned or with unknown contents must be properly identified and labeled prior to pickup for subsequent disposal. Personnel who work in the general area and have knowledge of the process should be canvassed to determine if they can identify the waste and label it. If this search is not productive, then each container or group of containers must be sampled and then labeled according to the analytical results.

### 4.2 Responsibilities

#### 4.2.1 Hazardous Materials User shall:

4.2.1.1 Consider chemical and material hazards during initial design. Substitute with less hazardous materials when feasible. Material cost should not be the primary determining factor in material selection.

4.2.1.2 Identify and evaluate operational changes that would reduce the amount of hazardous material used, the amount of waste generated, or the exposure of the work force and environment before any determination is made to select and use a hazardous material.



- 4.2.1.3 Complete Air Force Form 3952 (AF-3952), *Chemical/Hazardous Material Request Authorization* (see SHE Standard E6, Hazardous Materials Management) to have all hazardous materials authorized for use. (Access to AF-3952s is available from the [Air Force E-Publishing](#) website.)

**4.2.2 Waste Generator shall:**

- 4.2.2.1 Follow the procedures for collection, accumulation, and turn-in of chemical and petroleum wastes as outlined in this standard.
- 4.2.2.2 If an IAP has been established, appoint IAP Managers and provide training as specified in *5.0 Training Requirements*.
- 4.2.2.3 Order proper DOT containers for the waste through Logistics Support.
- 4.2.2.4 Keep different wastes segregated as appropriate.
- 4.2.2.5 Retain training records showing job title, job description, name of person, type of training, and date received.
- 4.2.2.6 Contact the Environmental Quality Office (454-3521) for assistance.
- 4.2.2.7 Place drum(s) in an area for pickup by HWOOG that is accessible by a forklift and/or truck.

**4.2.3 Hazardous Materials Management System Administrator shall:**

- 4.2.3.1 Manage a hazardous materials/hazardous waste database that controls the issues of hazardous materials and monitors the path of disposition of the materials by requester through final use.
- 4.2.3.2 Provide a Material Safety Data Sheet (MSDS) for hazardous chemicals upon request.
- 4.2.3.3 Complete Form DD-1348-1A, *Disposal Turn-In Document (DTID)*, for waste turn-in to the Defense Reutilization and Marketing Office (DRMO) or a hazardous waste disposal subcontractor.
- 4.2.3.4 Respond, as requested, to AEDC Asset Management's (TSDCA) direction relative to the movement of hazardous waste containers, maintenance of hazardous waste storage facilities, and management of inspection records.

**4.2.4 Environmental Quality shall:**

- 4.2.4.1 Manage base collection, storage, and disposal of hazardous wastes, petroleum wastes, spent oil, and non-hazardous wastes that have no local disposal options.
- 4.2.4.2 Follow procedures for chemical and petroleum waste management including labeling, storing, transporting, and disposing through DRMO.
- 4.2.4.3 Manage the ACCSs (90-day) and the TSDF. Management includes maintaining records and conducting routine inspections required by regulations.
- 4.2.4.4 Maintain base waste generation quantity records and prepare reports for base management and regulatory agencies.
- 4.2.4.5 Maintain an inventory of the existing and future waste streams including waste generation locations and EPA waste codes.



4.2.4.6 Maintain the following records: Disposal logs; lab analyses; Form GC-565, *Waste Identification*; Form DD-1348-1A, *Disposal Turn-in Document (DTID)*; Form GC-1337, *Chemical Waste Data Sheet*; waste profile sheets; manifest files; inspection logs; training records; hazardous waste/materials database.

4.2.4.7 If AEDC does not receive a signed copy of a manifest from the designated disposal facility within 35 days of the date a waste was accepted by the initial transporter, immediately contacts the initial transporter and/or the operator of the designated disposal facility to determine the status of the hazardous waste [1200-1-11-.03-(5)(c)(I)(i)].

4.2.4.8 If AEDC does not receive a signed copy of a manifest from the designated disposal facility within 45 days of the date a waste was accepted by the initial transporter, files an exception report to the Commissioner within five days after the 45-day period expires [1200-1-11-.03-(5)(c)(I)(ii) and (iii)].

4.2.4.9 Maintain a copy of the hazardous waste manifest on file for at least three years.

4.2.4.10 Maintain and distribute all labels upon request.

4.2.4.11 Conduct annual IAP training for all IAP managers and assistant managers as well as all employees who put wastes into a drum at an IAP.

#### **4.2.5 Logistics Support shall:**

4.2.5.1 Maintain an adequate inventory of Department of Transportation (DOT)-approved drums for issue.

4.2.5.2 Utilize a tracking system for drum management.

4.2.5.3 Place tracking number labels (small white labels approximately one inch by two inches) on both the top and side of each drum. Since the top is removable on open-head drums, care must be taken to keep the matching lid with the matching drum.

#### **4.2.6 Waste Generator/IAP Manager shall:**

4.2.6.1 Ensure personnel who routinely work with chemical wastes have proper training. Maintain training records in accordance with training requirements outlined in this standard (*see 4.3, Training Requirements*).

4.2.6.2 Coordinate first time generation of new waste with the Environmental Quality Office in order to complete Form GC-1337, Part A. (Part B of Form GC-1337 is completed by the HWOG.)

4.2.6.3 Procure the proper drums for the waste through Logistics Support.

4.2.6.4 Containerize waste such that dissimilar wastes are not combined into a single container. This ensures that non-RCRA regulated wastes, such as oil or ethylene glycol, remain uncontaminated. Proper segregation avoids unnecessary disposal cost.

4.2.6.5 Fill drums leaving a 10 percent air space (approximately four inches in a 55-gallon drum). Ensure that drums are closed and bungs with seals are tightened **at all times** except when sampling or adding waste. Inspect drums every seven days for leaks, spills, or overfilling. ***It is the generator's responsibility to repack in the appropriate container if leaks, spills, or overfilling occurs.*** This repacked waste must also be handled following these procedures. Overpack containers are available from Logistics Support. Contact the AEDC Operations Center (454-7752) immediately if a leak, spill, or overfilling occurs.

4.2.6.6 Label container with a **HAZARDOUS WASTE** label for RCRA hazardous waste or a **NON-HAZARDOUS WASTE** label for other wastes (*see 4.1.3, Container Labeling*).

4.2.6.7 Complete Form GC-565 for each drum involved. If more than one drum holds the same waste and the waste is generated on the same day, only one Form GC-565 is necessary. However, all drum numbers and

total volume must be recorded on the form. Outside subcontractors must include the project number on the Form GC-565, *Section A, "How waste was produced."*

- 4.2.6.8 Place drum(s) in an area for pickup by HWOOG that is accessible by a forklift and/or truck.
- 4.2.6.9 Contact the HWOOG (454-3521) to have the drum picked up and moved into an ACCS (90-day) or the TSDF. Drum transfer to an appropriate storage area must occur within 72 hours of the start date.
- 4.2.6.10 If an IAP has been established, weekly inspections must be performed every seven days or less using Form GC-1802, *Hazardous Waste IAP Weekly Inspection Checklist*.

**NOTE:** No IAP can be established or deleted without AEDC Asset Management Flight approval.

#### **4.2.7 Waste Generator Lab Packing Waste Chemicals shall:**

- 4.2.7.1 Obtain MSDS or lab analysis for each item.
- 4.2.7.2 Obtain lab pack number from the HWOOG. The lab pack number issued serves as an identifier just as the drum number is to a 55-gallon container.
- 4.2.7.3 Segregate different wastes into separate lab packs. Pack similar waste items in cardboard boxes, ensuring only items specified are included. Use shredded paper or other packaging material to absorb spillage and to prevent breakage. ***Do not use oil sorbent for packaging.***
- 4.2.7.4 Include the MSDS or the lab analysis inside the top of the box. ***Do not seal the box*** – the contents must be examined by the recipient. Label the box with the correct label.
- 4.2.7.5 Complete Form GC-565, Section A, for each type of waste and attach a copy of the MSDS or lab analysis to the GC form. Call the HWOOG (454-3521) to schedule pickup of the containers for disposal.

#### **4.2.8 Petroleum Waste Generators shall:**

- 4.2.8.1 Ensure personnel who routinely work with petroleum wastes have the applicable training (*see 5.0, Training Requirements*).
- 4.2.8.2 Procure the proper drums for the waste through Logistic Support.
- 4.2.8.3 Ensure that chemical and petroleum wastes are kept separate to avoid contaminating spent oils.
- 4.2.8.4 Prepare a ***NON-HAZARDOUS WASTE*** label for each drum and affix the label to the upper portion of the drum. Fill in the start date when the drum is filled (*see 4.1.6, Spent Oil Drum Labeling*). Also, these drums must be inspected annually, and those passing the inspection must be labeled with an Annual Drum/Polytank Inspection label (*see 4.1.3, Container Labeling, and ANNEX H*).
- 4.2.8.5 Do not fill the drum completely full. Leave at least 10 percent drum volume air space (four inches in a 55-gallon drum).
- 4.2.8.6 Ensure drums are kept tightly closed except when in use.
- 4.2.8.7 Inspect all drums at least weekly for spills, leaks, or overfilling.
- 4.2.8.8 Transfer petroleum waste found to be contaminated and reclassified as hazardous waste into a DOT-approved drum, prepare Form GC-565, and properly label with the ***HAZARDOUS WASTE*** label (*see 4.1.4, Hazardous Waste Labeling*). Yellow used oil drums and drums procured from Logistics Support are DOT-approved. Using these exclusively will avoid the need for waste transfer.

4.2.8.9 Complete Form GC-565 for each drum or each group of drums where the oil was from the same source with the same start date.

4.2.8.10 Place drum(s) in an area accessible by a forklift and/or truck, and prepare a Work Request for Roads and Grounds to pick up drum(s) and transport them to a 90-Day site.

**4.2.9 ACCS (90-day) Manager shall:**

4.2.9.1 Receive waste and Form GC-565 from generator. Ensure that drums containing petroleum products have drum inspection labels.

4.2.9.2 Sample waste as needed.

4.2.9.3 Ensure that Form GC-565 is properly completed and the container label reflects the proper information (based on analysis or generator knowledge). Resolve questionable information with generator.

4.2.9.4 Ensure that incompatible wastes are stored separately and that hazard warning signs are properly posted in accordance with *AEDC SHE Standard B10, Safety Signs and Markers*.

4.2.9.5 Perform weekly inspections and inventories at the ACCS (90-day) and complete Form GC-1270, *Waste Accumulation Site Inspection Record*. Maintain documentation of weekly inspections to include inspection dates, container numbers and wastes stored, container condition, any corrective actions, and dates the containers enter and leave the ACCS (90-day). Monthly, complete Form GC-622, *Building Manager's Fire Extinguisher Checklist*.

4.2.9.6 Ensure hazardous wastes are removed from the ACCS within 90 days of generator's start date.

4.2.9.7 In the event of a spill, notify the AEDC Operations Center at 454-7752.

**4.2.10 TSDF Manager shall:**

4.2.10.1 Ensure Form GC-565 is complete and verify container labels, including drum inspection labels, are accurate.

4.2.10.2 Transport waste, except for spent oil, from the ACCS (90-day) or transport directly from the generator to the permitted TSDF.

4.2.10.3 Weigh drums and lab pack containers prior to placing in permitted storage bays.

4.2.10.4 Maintain the TSDF weekly inspection records (HWF-2 checklist: AEDC Hazardous Waste Storage Inspection Log) per *40 CFR 261-270* and *RCRA Part B Permit*.

4.2.10.5 Provide shipping information and the appropriate Contract Line Item Number (CLIN) on Form GC-565.

**5.0 TRAINING REQUIREMENTS**

5.1 Supervisors, generators, IAP managers, workers who move or transport chemical wastes, and storage facility operators must receive annual training. Annual training means once every twelve months and not anytime during each calendar year. Environmental Quality shall provide this annual IAP training.

5.2 Any personnel who work with chemical and petroleum waste in any way must be able to respond effectively to emergencies involving chemical and petroleum wastes. This training must encompass the following topics specified by *40 CFR 264.16*:

- Spill prevention and response
- Emergency procedure (fires, explosions, and toxic fumes)

- Communication and alarm systems in the work area
- Waste chemical compatibility
- Personal protective equipment
- Management and disposition of chemical wastes
- Health effects of the chemical and petroleum wastes handled in their areas

5.3 Initial training must be provided within six months of assignment to any of the above-mentioned positions. ***A newly-assigned employee without training must not work alone.*** Craft supervisors must accompany the new hires or assign trained employees to work with them prior to meeting training requirements. Supervisors must retain training records for three years from the date the employee last worked at the facility. ***Maintenance of training records is not required for activities involving petroleum waste only.***

## 6.0 INSPECTIONS / AUDITS

Environmental Quality shall conduct routine inspections of the TSDF and ACCSs (90-day) as required by regulations.

## 7.0 REFERENCES

40 CFR 260-272, EPA Resource Conservation and Recovery Act (RCRA)

40 CFR 761, EPA PCB Regulations

AFI 32-7042, Waste Management

AEDC Hazardous Waste Management Plan

AEDC RCRA-Part B Treatment, Storage, and Disposal (TSD) Permit

### AEDC SHE Standards

B10, Safety Signs and Markers

D11, Ionizing Radiation

E6, Hazardous Materials Management

E7, Asbestos

E11, Oil Pollution Prevention and POL Storage Tank Management

E15, Explosives Safety

E16, Polychlorinated Biphenyls (PCBs)

E17, Oil and Hazardous Substances Spill Response

## 8.0 ANNEXES

- A. Accumulation Sites (90-Day)
- B. Initial Accumulation Points
- C. Form GC-565, Waste Identification
- D. Form GC-1749, HAZARDOUS WASTE Label / PCB WASTE Label
- E. Form GC-1747, NON-HAZARDOUS WASTE Label
- F. Form GC-1514, CHEMICAL HAZARD ALERT Label
- G. Form GC-1748, CAUTION—CONTAINS PCBs Label
- H. Annual Drum/Polytank Inspection Label

## 9.0 SUPPLEMENT

NFAC A321-0801-XSP E18 Managing Wastes Containing Chemical or Petroleum Products

**ANNEX A****Accumulation Sites (90-day)***Permitted for Hazardous Waste***AEDC/TSDCA Hazardous Waste Accumulation Sites (ACCSs)\***  
(Revised **November 2011**)

<b>LOCATION</b>	<b>MANAGER / ALTERNATE</b>	<b>PHONE</b>	<b>IMMEDIATE SUPERVISOR</b>	<b>AF POC PHONE</b>
Chem Lab Bldg. 464	John Bowles Jim Hicks	454-4343 454-3628	Ben Partin 454-3521	Ruel Burns 454-3296
PWT Bldg. 768	John Bowles Jim Hicks	454-4343 454-3628	Ben Partin 454-3521	Ruel Burns 454-3296
Motor Pool Bldg. 1412	John Bowles Jim Hicks	454-4343 454-3628	Ben Partin 454-3521	Ruel Burns 454-3296

*\*No 90-day Accumulation Sites will be established or deleted without AEDC/TSDCA management's approval.*

**ANNEX B****Initial Accumulation Points (IAPs)***Permitted for Hazardous Waste*

**AEDC/TSDCA IAPs\***  
**(Revised November 2011)**

PERMIT NO.	LOCATION	MANAGER / ALTERNATE	PHONE	IMMEDIATE SUPERVISOR	AF POC/PHONE
C3	Bldg. 1478 BCE Paint Shop (In cabinet outside SW corner)	Chris Jones Mark Boaz	454-7298 454-7440	Chris Jones 454-7298	Jimmy Zelkan 454-6732
C4	Bldg. 1601 Old Salvage Yard (West of Gate 2)	Chris Jones Mark Boaz	454-7298 454-7440	Chris Jones 454-7298	Jimmy Zelkan 454-6732
C10	Bldg. 445 Chem Lab Storage Area (In cabinet outside West entrance)	Jack Lamons Cody Bailey	454-3477 454-3571	Steve Ary 454-5459	TSgt. Jamie Johnson 454-5161
C12	Bldg. 350 PMEL Storage Shed (In cabinet outside East entrance)	David Claudio Chad Bloom	454-3501 454-7291	David Compton 454-5633	TSgt. Jamie Johnson 454-5161
C14	Bldg. 1602 Old Salvage Yard (West of Gate 2)	Chris Jones Mark Boaz	454-7298 454-7440	Chris Jones 454-7298	Jimmy Zelkan 454-6732

***\*No IAPs will be established or deleted without AEDC/TSDCA management's approval.***

## ANNEX C

## Form GC-565, Waste Identification

**WASTE IDENTIFICATION**

Section A to be completed for all wastes by the Organization turning in the waste.

ORGANIZATION	CONTACT	IAP	PHONE EXT.	BLDG/MAIL STOP	DRUM NO./LAB PACK NO.
START DATE	TYPE OF WASTE (IE OIL, SOLVENTS, ETC.)			(ACCS) ACCUMULATION SITE(90-DAY)	
PHYSICAL STATE <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> pH:		CONTAMINANTS AND APPROXIMATE CONCENTRATION		WASTE STREAM ID NO.	EST QUANTITY (Lbs. or Gallon)
A HAZARDOUS MATERIAL <input type="checkbox"/> YES <input type="checkbox"/> NO EPA WASTE CODE		HOW WASTE WAS PRODUCED		CONTAINER TYPE (17E55, 17H55, etc.)	
LAB ANALYSIS NUMBER		TYPE PCB WASTE		PCB CONCENTRATION (Prior to decontamination efforts)	
<b>EXAMPLE</b>					
CERTIFICATION: I certify that the above information is correct to the best of my knowledge and portrays an accurate description of the waste.					
SIGNED			DATE		

Section B to be completed by TSDF Manager

B	STORAGE LOCATION	DATE STORED	DTID	INITIALS	DRUM WEIGHT
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Section C to be completed by Hazardous Waste Operations Group

C	RQ	PROPER SHIPPING NAME	HAZARD CLASS AND DIVISION	UN OR NA NO.	PACKING GROUP	DATE RECEIVED
PROFILE NUMBER		CLIN	PRICE	TOTAL AMOUNT	DISPOSITION	INITIALS

GC-565 (9/96) (EF)

PREVIOUS EDITION IS OBSOLETE



**ANNEX D****Form GC-1749, HAZARDOUS WASTE Label**

<b>HAZARDOUS WASTE</b>	
<b>FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.</b>	
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.	
Generator & Organization:	
Waste Identification:	
Waste Stream # :	<b>EXAMPLE</b>
EPA Waste Code(s) :	
Start Date:	
Comments:	
CONTAINS HAZARDOUS OR TOXIC WASTE HANDLE WITH CARE	
GC-1749, 20040226 UNCONTROLLED DOCUMENT WHEN PRINTED.	

**PCB WASTE Label**

**NOTE:** For PCB waste, use bottom portion only of Form GC-1749 as shown below. Use this label along with the Form GC-1748 label, *CAUTION—CONTAINS PCBs* (see ANNEX G).

<b>FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.</b>	
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.	
_____ Generator & Organization:	
_____ Waste Identification:	
_____ Waste Stream #:	
EPA Waste Code(s) :	
Start Date: _____	
Comments: _____	
_____ CONTAINS HAZARDOUS OR TOXIC WASTE HANDLE WITH CARE	

GC-1749. 20040226 UNCONTROLLED DOCUMENT WHEN PRINTED.

**ANNEX E**

**Form GC-1747, NON-HAZARDOUS WASTE Label**

<b>NON- HAZARDOUS WASTE</b>	
GENERATOR/ORGANIZATION: _____	
WASTE IDENTIFICATION: _____	
_____	
<b>EXAMPLE</b>	
DATE: _____	
COMMENTS: _____	
_____	
<b>NON-HAZARDOUS WASTE</b>	
GC- 1747, 20040225	UNCONTROLLED DOCUMENT WHEN PRINTED.

**ANNEX F****FORM GC-1514, CHEMICAL HAZARD ALERT Label**

<b>CHEMICAL HAZARD ALERT</b>	
Chemical/Trade Name	
Manufacturer's Name & Address	
<b>EXAMPLE</b>	
Health Hazard (Include target organ)	
Physical Hazard	
Special Precautions (personal protective equipment, ventilation, etc.)	
GC-1514 (4/88)	

**ANNEX G****Form GC-1748, CAUTION—CONTAINS PCBs Label**

<p><b>CAUTION</b> <b>CONTAINS</b> <b>PCBs</b> <b>(Polychlorinated Biphenyls)</b></p> <p>A toxic environmental contaminant requiring special handling and disposal in accordance with U.S. Environmental Protection Agency Regulations 40 CFR 761 -- For Disposal Information contact the nearest U.S. E.P.A. Office.</p> <hr/> <p>In case of accident or spill, call toll free the U.S. Coast Guard National Response Center: 800-424-8802</p> <p>Also Contact <b>EXAMPLE</b> Tel. No. _____</p>
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GC-1748, 20040226 UNCONTROLLED DOCUMENT WHEN PRINTED.

**ANNEX H**

**Annual Drum / Polytank Inspection Label**

**2011**  
**ANNUAL DRUM / POLYTANK**  
**INSPECTION**

**DATE (Month/Year)**\_\_\_\_\_

**NAME:** **EXAMPLE**\_\_\_\_\_

**ORG:**\_\_\_\_\_

**Figure 1**



# A321-0801-XSP E18 Managing Wastes Containing Chemical or Petroleum Products

This supplement has been approved for the NFAC Site.

**Review:** This supplement will be reviewed and updated using the same cycle as the AEDC Standard E18 “Managing Wastes Containing Chemical or Petroleum Products”.

**References:** AEDC Safety Standard E18 – Managing Wastes Containing Chemical or Petroleum Products at the AEDC NFAC Site.

**Scope:**

Some operations conducted at NFAC utilize a variety of chemicals and petroleum products that may generate waste once the products are no longer needed. In addition to these waste, this supplement also applies to other wastes that may be contaminated with chemical or petroleum product. The Environmental Protection Agency (EPA) have promulgated regulations to ensure that the workforce, work area, and the environment are protected from the potentially harmful effects of these waste. This supplement implements the program for management of waste containing chemical or petroleum products that are generated, handled, or disposed of by any NFAC Staff.

This supplement applies to all NFAC personnel, customers and vendors.

**NFAC Worksite Application:**

NFAC will follow the local NASA Ames Procedural Requirements APR 8800.3 Chapter 4 “Hazardous Waste Management”

I. NFAC Site Management shall:

1. Ensure that the supplement is followed.

II. NFAC Supervisors and Test Directors shall:

1. Ensure supplement is followed
2. Staff and customer to properly dispose of all hazardous waste through the NASA Ames Hazardous Waste Stream

III. NFAC Safety Engineer shall:

1. Assess program is in compliance
2. Ensure biohazard material is dispose of through the NASA Ames Health Unit
3. Approve all equipment used for hazardous waste through the ATOM Purchasing process
4. Ensure that all hazardous waste is disposed through the NASA Ames Hazardous Waste Stream
5. Coordinate through the NASA Ames Environmental Group for special hazardous waste disposal not handled by the NASA Hazardous Waste Group
  - a. Arrange with NASA Ames Environmental Group to sign off Hazardous Waste Manifest



## **A321-0801-XSP E18 Managing Wastes Containing Chemical or Petroleum Products**

### **IV. NFAC Staff shall:**

1. Ensure that the supplement is followed
2. Ensure all hazardous waste is properly stored at the satellite location
  - a. Waste Containers are labeled correctly
    - i. Accumulation Start Date
    - ii. Type of Substance
3. Maintain their training:
  - a. Satern Hazard Communication for Chemical Users (no refresher)
  - b. NASA Code Q Hazardous Waste and Spill Response (annual) or Satern Hazardous Waste Environmental Essentials, Spill Response