



Department of the Air Force  
HQ AEDC (AFMC)  
Arnold AFB, TN 37389

## Safety, Health, and Environmental Standard

---

**Title:** Hazardous Materials Management

**Standard No.:** E6

**Effective Date:** 09/23/2013

**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:

Contractor/ATA Director  
Safety, Health, and Environmental

Air Force Functional Chief

## Record of Review/Revision

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

Date/POC	Description
07/29/13 Michael Frederick	Major revision (changes are too extensive to mark all); read entire standard. Revised most sections to reflect new EESOH-MIS electronic process for approval of hazardous materials. Deleted old Annex C (old AF Form 3952). Re-sequenced subsequent annexes. Updated definitions to revised OSHA GHS Hazardous Communication Standard such as MSDS to SDS. Minor reformatting throughout.
03/20/13	Added NFAC supplement; no other changes.
03/09/10 Michael Frederick	Revised several sections to reflect new HMMS electronic AF Form 3952 process for approval of hazardous materials; also clarified HMMS process in several sections. Incorporated awareness and recommendations to implement the Priority Chemicals element of the Green Procurement Program. Deleted old Annexes A, B, C (old AF Form 3952). Re-sequenced old Annexes D, E, F to A, B, C. Revised old Annex E (now Annex C), <i>HazMat Authorization/Procurement Process</i> , to reflect new HMMS-generated AF Form 3952.
06/30/08 Kraig Smith	Revised Section 4.11 ( <i>Outside Vendor Requirements</i> ) to add specific requirements for outside vendors who use HazMat at AEDC. The revision describes the process by which outside vendors supply the HazMat information to AEDC, gives requirements for labeling of materials and disposal, and describes the HazMat review process and the collection of HazMat data for entry into the HMMS system. Removed Form GC-1642 from Annex C. Updated POC listing in Annex D.
11/1/07 Kraig Smith	Added definition of HMMS to Section 3.0; clarified definition of <i>Authorized User</i> . Edited various subparagraphs in Section 4.0 to improve readability and clarity. Updated reference list in Section 5.0. Added Form GC-1642 to Annex C and updated contact information in Annex D.
11/01/06 Mike Hodges	Deleted references to Point of Use (POU) concept; added new section 4.11, <i>Outside vendor HazMat Requirements</i> ; added two-year expiration date for AF Forms 3952; expanded Annex A, <i>Highly Hazardous Chemicals</i> , to include all chemicals on the EPA list; updated POC listing in Annex D; in Annex E, replaced HazMat flow diagram with updated <i>HazMat Authorization/Procurement Process</i> diagram. Minor editing throughout document to improve readability and clarity.
10/01/05 Mike Hodges	Revised Section 3.0 (Definitions) to include new terminology and the revised AFI 32-7086 HazMat definition; deleted references to the obsolete <i>Hazardous Materials License</i> (replaced by AF 3952); added AF 3952 authorization process; added Point of Use (POU) concept; added HAZMART <i>free-issue</i> program; updated contractor HazMat requirements. Added AF 3952 Form to Annex C; updated HazMat/Haz Waste POCs in Annex D; updated Annex E to reflect HAZMART (replaces <i>Pharmacy</i> ); added Annex F (HazMat Flow Diagrams) and Annex G (Acronyms).
02/28/05 Bob Mitchell	Changed all references of <i>HazMat Pharmacy</i> or <i>Pharmacy</i> to <b>HAZMART</b> in accordance with AFI 32-7086, <i>Hazardous Materials Management</i> (revised 01 Nov. 2004) and made other editorial changes to reflect the revised requirements of this AFI.
01/30/04 Mike Hodges	Updated organization structures to reflect new AEDC contractor effective 1 October 2003; added Appendix E (Hazardous Material/Hazardous Waste Points of Contact); added Annex F (Pharmacy-labeled Return Guidance); deleted obsolete Annex C (List of AEDC Top Ten Chemicals). General editing and format changes at direction of revised Center Operating Instruction 91-5.
10/1/00 Brett Weaver	Included the use of Synergen <sup>®</sup> ; focused on the HazMat Pharmacy concept; added a requirement for the return of empty containers and required documents.

**This is an uncontrolled copy when printed.**



# Safety, Health, and Environmental Standard

## HAZARDOUS MATERIALS MANAGEMENT

### 1.0 INTRODUCTION/SCOPE/APPLICABILITY

This standard applies to the procurement, use, storage, and disposal of hazardous materials at Arnold Engineering Development Complex (AEDC). This standard has the following purposes:

- Establish consistent policies, standards, and procedures for procurement, use, storage, and disposal of hazardous materials at AEDC.
- Comply with applicable environmental, health, and safety laws and regulations, specifically those listed as references to this document.
- Reduce the risk of hazardous materials release or spillage.
- Reduce the quantity and toxicity of chemicals used and hazardous waste generated.
- Allow tracking and accounting of AEDC hazardous materials for required reporting to state and federal agencies.

### 2.0 BASIC HAZARDS/HUMAN FACTORS

Hazardous materials (HazMats) are substances whose characteristics present a potential risk to human health and/or the environment. HazMat may be flammable, corrosive, reactive, toxic, radioactive, poisonous, carcinogenic, infectious, or any combination of these characteristics.

### 3.0 DEFINITIONS

AF Form 3952 – The *Process Authorization Report* is a form that establishes the standardized data required for HazMat procurement. This form is to be completed electronically in the EESOH-MIS software program to be authorized to use a material.

Authorized Material – HazMat authorized by the HazMat Cell through the AF Form 3952 authorization process described in this document. No AEDC employee may bring HazMat on base, or use HazMat on base, without authorization of the HazMat Cell.

Authorized User List (AUL) – A list of materials authorized by the HazMat cell to be used in a shop. to receive and use HazMat. Shop supervisors will be responsible for their personnel's proper use of HazMat. The shop supervisor will delegate HazMat to personnel as required by the task. AUs must understand the hazards of all materials they use and implement appropriate Environmental, Safety, and Occupational Health (ESOH) precautions. The *Authorized Users List (AUL)* is maintained by the EESOH-MIS Point of contact.

Base Operating Contractor – A long-term contractor directly accountable to the Air Force for the AEDC mission; term used to identify the AEDC Operation, Maintenance, Information Management and Support Contractor.

CMMS– Computerized Maintenance Management System changed from Synergen to Work and Asset Management (WAM)

Extremely Hazardous Substance (EHS) – Materials listed by the Environmental Protection Agency in Section 40, Code of Federal Regulations 355 (40 CFR 355). These materials present a significant risk to public health and safety in the event of release.

EESOH-MIS (Enterprise Environmental, Safety and Occupational Health – Management Information System) – The database system that is used at AEDC for cradle-to-grave management of all hazardous materials (HazMat) required for operation of the facility

EESOH-MIS Point of contact – The person responsible for the management of the Enterprise Environmental, Safety and Occupational Health – Management Information System database. The database point of contact implements and controls the hazardous material tracking data resources.

Hazardous chemical – Any chemical which is a physical hazard or a health hazard. These include a simple asphyxiant, combustible dust, pyrophoric gas or a hazard otherwise classified. The hazard communication standard covers chemicals in all forms--liquids, solids, gases, vapors, fumes and mists – whether they are contained or not. The broadest perspective should be used when identifying hazardous chemicals. This term includes chemicals that

may be generated as a by-product of a process such as fumes from welding processes or nitrogen oxides from combustion processes.

Hazardous Material (HazMat) – All items (including medical supply items but excluding drugs in their finished form and pharmaceuticals in individually-issued items) covered under EPCRA tracking requirements, the OSHA HazCom Standard, and all Class I and Class II Ozone Depleting Substances (ODS) (does not include munitions or solid waste). HazMat may be a solid, liquid, or gas. HazMat may be toxic, flammable, reactive, radioactive, or may present a risk to human health or the environment if mismanaged. **For the purpose of this standard, hazardous substance, hazardous material, HazMat, and hazardous chemical have the same meaning.**

HAZMART – The facility or location (previously known as the HazMat Pharmacy) where customers can obtain HazMat and where HazMat is managed and tracked. The HAZMART is the only entity on base authorized to issue HazMat.

HazMat Cell – An integrated group of specialists from several base organizations assigned responsibility for overall management of HazMat. Represented organizations are Logistics, Safety, Industrial Hygiene (IH), and **Environmental**. Representatives of the IH, Safety, and Environmental Offices are responsible for review and authorization of HazMat requests; all three offices must authorize the use of HazMat before the material may be brought on base.

HazMat Free-Issue Area – A HAZMART storage area where serviceable, full or partial containers of HazMat are maintained for reissue to authorized HazMat users at no charge. Organizations shall coordinate with the HAZMART to turn-in excess inventory for inclusion in the HazMat Free-Issue Program.

Health Hazard – A health hazard means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure; or aspiration hazard (OSHA 1910.1200).

HMMP (Hazardous Materials Management Process) Team – A cross-functional team established to provide oversight for the major areas covered in AEDC's HMMP, the HazMat Management Program and the Ozone Depleting Substances (ODS) Management Program. The complete responsibilities and function of the HMMP Team are defined in AFI 32-7086, *Hazardous Materials Management*.

Outside Contractor/Subcontractor – An organization employed by a contractor or the Air Force to do construction, maintenance, repair or other work at AEDC. There is no employment relationship, control or supervision of the subcontractor's employees by AEDC contractors. Also referred to as the construction contractor.

Physical Hazard – A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.

POC Monitor – The Point of Contact (POC) or custodian of a HazMat storage cabinet or HAZMART return cabinet assigned by the organization that owns the cabinet. The POC monitor is responsible for proper storage and use of HazMat in the organization's HazMat storage cabinet and/or HAZMART return cabinet. The POC monitor serves as an organization's main point of contact for dealing with HazMat issues.

Safety Data Sheet (SDS) – A fact sheet provided by the manufacturer or supplier of a hazardous material. The SDS describes a material's hazards in sufficient detail to develop proper storage, use, and handling procedures. AEDC SHE Standard A9, *Hazard Communication*, provides specific requirements for maintaining SDSs at AEDC. OSHA has changed the term MSDS to SDS. Manufacturers will begin using the new SDS format as they transition into compliance with the revised standard. Until full compliance is reached by manufacturers both MSDS and SDS formats may be encountered (OSHA 1910.1200).

Shop – A term used within EESOH-MIS to define an area where materials are issued or a site-designated area in which work processes are performed. A Shop may also be an area or group of people with the same workplace exposure.

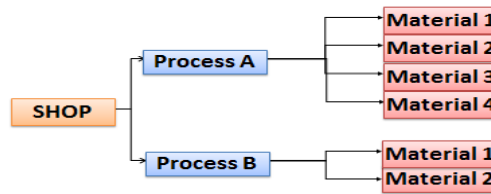
## **4.0 REQUIREMENTS/RESPONSIBILITIES**

### **4.1 HazMat Authorization**

4.1.1 *Process Authorization Report* (Air Force Form 3952) establishes the standardized data required to request and authorize HazMat. The process authorization request is to be completed electronically within the EESOH-MIS software program. A process authorization request is required for all processes that use

chemicals not currently authorized for use in the requestor's shop. Many materials can be authorized with in a single process as the following diagram depicts:

*Process Centric Authorizations*



To determine if a chemical needs authorization request, please refer to the AEDC Environmental Management Home Page (<https://aedcgisweb.arnold.af.mil/enviro/>). **No one may bring a HazMat onto the base, or use a HazMat on base, until all required authorizations described in this section are obtained.**

**NOTE:** The HAZMART does not require authorizations to perform the supply functions of ordering, receiving, stocking, and storing hazardous material. The authorization request is not an individual user authorization, but is specific to the requesting shop or workplace. The requested material may not be used elsewhere.

- 4.1.2 To request authorization for hazardous material procurement, a requester shall add a hazardous material to an existing process or create a new process. The authorization request shall be completed through EESOH-MIS software. The requestor/user will ensure the most recent manufacturer-specific SDS is submitted to the HazMat cell with each material authorization request. *The material authorization sets the maximum stock level to be maintained in the shops' HazMat storage area (typically a one month supply). The minimum material required to support mission essential maintenance activities should be requested to prevent shelved materials from exceeding expiration dates.*

**NOTE:** Before filling out an authorization request, the requestor should go to the AEDC Environmental Management Home Page <https://aedcgisweb.arnold.af.mil/enviro/>.

- 4.1.3 The most recent copy of the SDS for the material requested shall be submitted to the Environmental Office for approval in EESOH-MIS. Sufficient information must be provided to allow the HazMat Cell to make an authorization determination. Incomplete submissions, or those with insufficient information, shall be denied. Instructions for preparing an authorization request are provided with training. (See Section 6.0 Training.)

**NOTE:** An authorization request must be completed and approved before a CMMS requisition can be released. An CMMS requisition can be entered into WAM at the same time an authorization request is submitted.

- 4.1.4 The HazMat Cell shall make the following determinations for each authorization request:
- Determine if the material is on the exempt list or is an exempt list candidate.
  - Deny or authorize use of a requested HazMat.
  - Authorize the HazMat with conditions of use.
- 4.1.5 The HazMat Cell shall review the authorization request, and the material's SDS. If the HazMat Cell determines that the requested material does not need to be tracked, Material Control is notified and the material requisition is then released for procurement. The HazMat cell reviews the material to determine if it is a candidate for exemption. The material will then be presented by **Environmental** to the HMMP team to determine if it can be added to the exempt list.
- 4.1.6 When a HazMat is authorized, the requestor shall comply with all conditions of use.
- 4.1.7 Once a requestor has obtained HazMat Cell authorization, **Environmental** adds the material to the shop's EESOH-MIS AUL list. This authorizes the shop to receive HazMat from the HAZMART. The HAZMART shall not issue hazardous material to any shop unless the material is listed in the shop's EESOH-MIS AUL list.
- 4.1.8 Approved AF Forms 3952 are available to be viewed or printed in EESOH-MIS if requestors would like to maintain a copy of active AF Form 3952 authorizations in their HazCom or SDS notebook.

## 4.2 Hazardous Material Selection

- 4.2.1 HazMat users shall select the least hazardous substance for a job and shall substitute non-HazMat or reduced-risk HazMat whenever possible. The selected material should be the best choice to balance and minimize fire, health, and environmental hazards. Consult with Safety, IH or **Environmental** specialists for selection advice as necessary when planning a job or project that requires the use of hazardous materials.
- 4.2.2 HazMat requestors shall prepare the requisition for only the quantity of HazMat required (as specified on the AF Form 3952 authorization request) to support immediate mission requirements. **It is not acceptable to stockpile HazMat without specific authorization from the HMMP Team.**
- 4.2.3 The HAZMART shall only issue HazMat that has been authorized through the authorization request process.
- 4.2.4 Executive Order (EO) 13423, “Strengthening Federal Environmental, Energy, and Transportation Management,” requires federal agencies to reduce the quantity of toxic and hazardous chemicals and materials acquired, used or disposed of by the agency. The toxic and hazardous chemicals targeted by EPA as “priority chemicals” include the following:
- Cadmium
  - Lead
  - Mercury
  - Naphthalene
  - Polychlorinated Biphenyls (PCBs)

All users (including outside vendors) will seek an alternative source not containing these constituents. If the HazMat user must have a product that contains one of these targeted chemicals, the use must be justified in the request. The user may contact Industrial Hygiene or Environmental for assistance to determine if a substitute material is available. The monitoring of priority chemicals is included as part of AEDC’s Green Procurement Program. Monitoring of outside vendors will be as discussed in Section 4.9.

## 4.3 Hazardous Material Procurement

- 4.3.1 Hazardous material procurement shall be limited not to exceed the quantity that is required for immediate mission requirements.
- 4.3.2 All HazMat requisitions shall be processed and coordinated in accordance with the CMMS requisition system and shall be reviewed and authorized by the HazMat Cell prior to procurement. Issue of hazardous materials to AEDC employees shall be coordinated through the HAZMART. Only those items specified on the authorization request (in the shop’s AUL) may be ordered. Substitutes recommended by Procurement must be approved via the HazMat Cell. If a substitute is offered during the bid process, the requester must submit a SDS of the substitute material to HazMat Cell for review. If the HazMat Cell determines the substitute material is not acceptable, then the original requested material must be procured. If the substitute material is acceptable, the requestor must enter the new stock number to the shops AUL.
- 4.3.3 Hazardous materials brought on base by customers, contractors or vendors through any process other than the HAZMART shall be identified and must be coordinated through the HazMat Cell. Manufacturer’s SDSs for all HazMat brought on base shall be submitted to the HazMat Cell for review as described in section 4.4 and 5.0.

## 4.4 Hazardous Material Vendor Samples

Acceptance of hazardous material samples from a vendor requires coordination with the HazMat Cell. Vendor-supplied hazardous material samples must meet the following requirements:

- Quantity shall be limited to the minimum amount required for evaluation of the product.
- The sample container shall be clearly labeled to identify the contents (In accordance with OSHA) and shall be clearly marked with the words *VENDOR SAMPLE*; the name of the AEDC person responsible for the sample; and the date of receipt of the sample. These are the only labeling requirements? Doesn’t have to say what it is?
- A manufacturer’s SDS that list all of the ingredients for the material shall be reviewed and authorized by the HazMat Cell prior to accepting the material from a vendor. **AEDC employees shall not bring any hazardous material onto the base or use any hazardous material on base, until all required authorizations described in this SHE standard are obtained.**

- Vendors must agree to accept return of unused sample material.
- A report of the user's evaluation of the material shall be submitted to the HazMat Cell to facilitate evaluation for use of the material in other areas.

#### 4.5 Hazardous Materials Storage

- 4.5.1 The only materials authorized for storage in Flammable Storage Cabinets (FSC) are flammable and combustible liquids. (*NOTE: As used in this SHE Standard, the term "liquids" includes gels, caulking, and similar "tube-packaged" materials.*) Questions pertaining to flammable liquid storage should be directed to AEDC Fire Prevention.
- 4.5.2 Hazardous materials shall be stored in accordance with the requirements of 29 CFR 1910 Subpart H, *Hazardous Materials* (1910.101 to 1910.120), AEDC Center Operating Instructions, and applicable SHE Standards (A9 – *Hazard Communication*; D4 – *Compressed Gas Cylinders*; E14 – *Ozone Depleting Substances*; E16 – *Polychlorinated Biphenyls [PCBs]*).
- 4.5.3 Care must be taken to ensure hazardous materials stored together are chemically compatible. The AEDC Environmental Management website provides a limited list of chemical compatibilities. The manufacturer's SDS generally specifies incompatibilities in Section 10, *Stability and Reactivity*. Questions pertaining to chemical storage compatibilities should be directed to the HazMat Cell.
- 4.5.4 Compressed gas cylinders shall be stored in accordance with the requirements of AEDC SHE Standard D4, *Compressed Gas Cylinders*.
- 4.5.5 All flammable storage cabinets (FSCs) shall be registered with AEDC Fire Prevention. Fire Prevention shall maintain a database of FSC locations and POCs. Owners of FSCs shall notify Fire Prevention when an FSC is placed in service, removed from service, or relocated.
- 4.5.6 Hazardous material storage in shop HazMat storage areas shall be limited to the levels authorized. The storage shall be no more than the quantity that will be used for immediate testing and support operations. Initial purchase cost for hazardous materials is not justification to procure larger than necessary quantities of hazardous materials. Storing materials in quantities larger than necessary is the primary cause of material deteriorating and becoming unusable, resulting in hazardous waste.

#### 4.6 Responsibilities

- 4.6.1 Individual organizations are required to take responsibility for HazMat stored and/or used in their areas. This responsibility includes assigning POCs, receiving HazMat from the HAZMART, proper HazMat storage and usage, and ensuring that all HazMat users receive appropriate training as described in the HazCom Standard (A9).
- 4.6.2 HazMat users shall review the appropriate manufacturer's SDS and approved AF Form 3952 before use of a hazardous material to ensure proper usage, proper PPE, and proper storage.
- 4.6.3 All persons receiving hazardous material shall be knowledgeable of established AEDC HazMat procedures and shall ensure that all hazardous materials received are stored in accordance with Section 4.4 of this SHE Standard.
- 4.6.4 Job monitors shall forward manufacturer's SDSs for outside contractors' HazMats to the Environmental and IH sections for filing and review.
- 4.6.5 Members of the HazMat Cell, through ESOHCAMP inspections and IH surveys, shall periodically inspect HazMat storage areas for regulatory compliance and provide feedback to the HAZMART Manager and the POC.

#### 4.7 HazMat Usage

- 4.7.1 HazMat shall be issued only to shops identified in the EESOH-MIS database as authorized users. Authorized users are shop or work area supervisors who are responsible for the proper use of HazMat within their shop/area. The authorized user may delegate the use of HazMat to anyone under their supervision, but is responsible for ensuring that delegated users are knowledgeable about safe and proper use of the HazMat. This delegation or "Chemical Specific Training" should be recorded in the HazCom notebook. This is required by SHE Standard A9 for chemical/hazardous material specific training documentation requirements.



4.7.2 Adequate controls must be in place to protect employees, public health and safety, and the environment when HazMat is in use.

4.7.3 HazMat shall not be removed from the workplace or EESOH-MIS shop where it was issued.

#### **4.8 Transfer Off-base**

4.8.1 Hazardous materials shipped off-base must be packaged and labeled in accordance with Department of Transportation (DOT) regulations. Failure to comply with DOT requirements may lead to violation of federal and state law. HazMat obtained through EESOH-MIS must be removed from the system if it is shipped off-base either as HazMat or Hazardous Waste (e.g., if material exceeds shelf-life, etc.). The removal of material from the EESOH-MIS system can be accomplished by turning the material in as a used material and changing the container status as appropriate. This will effectively remove the material from the EESOH-MIS system.

4.8.2 The Traffic Management Office (931-454-7805) is the point of contact for off-base shipment of hazardous materials.

#### **4.9 Returns and Disposal**

4.9.1 Returning empty HazMat containers to the HAZMART facilitates completes the HazMat tracking process; therefore, it is important that **ALL** empty HazMat containers be properly returned to the HAZMART. Failure to return empty containers will result in the shops exceeding their maximum on-hand limits found in EESOH-MIS and possible delays in receiving their HazMat issues. HAZMART-issued labels must remain on empty material containers to insure accuracy of HazMat usage data. HazMat is considered *in use* until the material's container is turned in as *empty*, or the material has been properly disposed in accordance with hazardous waste disposal requirements. Actual tracking of materials is accomplished in the EESOH-MIS.

4.9.2 When a HazMat is completely used, the empty container shall be returned to the HAZMART or placed in the nearest HAZMART return cabinet. HAZMART return cabinets are placed within the facilities for convenience in returning empty HazMat containers and are routinely checked by HAZMART personnel for return items. Organizations that have HAZMART return cabinets must designate a POC for each cabinet. The POC serves as the organization's main point of contact for dealing with HazMat returns.

4.9.3 Non-empty HazMat containers or unlabeled containers shall not be placed in HAZMART return cabinets. The HAZMART does not have the responsibility to identify unlabeled or used materials or dispose of hazardous waste. Contact the Hazardous Waste Operations Group (HWOG) at 454-3521 or 454-3628 for information regarding hazardous waste disposal.

4.9.4 HazMat must be disposed in compliance with SHE Standard E18, *Managing Wastes Containing Chemical and Petroleum Products*, and applicable permits issued to AEDC by federal and state regulatory agencies. **HazMat shall not, under any circumstance, be disposed by pouring down a sink or drain, into a ditch or creek, onto the ground, or into any dumpster or other container identified for solid waste management.**

4.9.5 Unopened HazMat in original undamaged containers and certain used HazMat (evaluated on a case-by-case basis) may be acceptable for issuing by the HAZMART as free-issue material. The HAZMART shall accept and list excess usable HazMat as free-issue material. Free-issue HazMat may be issued to any organization authorized in EESOH-MIS to receive the HazMat. The HAZMART has final determination over which HazMats are acceptable for free issue.

4.9.6 Excess HazMat determined to be waste shall be lab packed by the owner of the material and turned over to the HWOG for disposal. Refer to AEDC SHE Standard E18, *Managing Wastes Containing Chemical or Petroleum Products*, for additional information concerning lab packing of hazardous waste. (**NOTE:** *The owner of the waste material shall coordinate with the HAZMART to ensure that the material's EESOH-MIS status is marked "waste" prior to enclosing it in a lab pack.*)

#### **5.0 OUTSIDE CONTRACTOR REQUIREMENTS**

5.1 Outside contractors shall provide the Base Operating Contractor buyer or AF contracting officer notification of any hazardous materials they plan to use while performing work on-site at AEDC in accordance with required submittals. The information submitted must include at a minimum: material



- name, manufacturer, manufacturer part number, and quantity (to include size and number of containers). A manufacturer's SDS for each listed material must also be submitted.
- 5.2 The Base Operating Contractor buyer or AF contracting officer, upon receipt of the outside contractor HazMat submittal, will forward the information to the AF Program Manager or the Base Operating Contractor job monitor. The AF Program Manager or the Base Operating Contractor job monitor will ensure the information is provided to Base Operating Contractor Environmental Branch, MS-1800.
  - 5.3 The Environmental Section will initiate the HazMat cell to review submitted SDSs. Should any items be disallowed during the review process, the Environmental Section will notify the Base Operating Contractor buyer or AF contracting officer.
  - 5.4 Outside contractors shall not deposit hazardous materials (including empty aerosol cans), lubricants, oils, liquids or related materials in refuse containers on base. Unused chemicals provided by the outside vendor must be removed from AEDC at completion of the job. Unused chemicals provided by AEDC must be turned in for reuse. All chemical waste must be turned in for proper disposal unless agreed by contract for the contractor to dispose of.
  - 5.5 In accordance with OSHA 29 CFR 1910.1200, all containers, other than portable containers that will be used immediately, must be labeled with the name of the contents (trade name, common name, or chemical name). Yellow chemical labels, green non-hazardous waste labels, and yellow and red hazardous waste labels are available through the Hazardous Waste Operations Group.

## 6.0 TRAINING REQUIREMENTS

Personnel who use HazMat issued from the AEDC HAZMART are required to have received *Hazard Communication Training*. Each organization shall ensure that employees who work with HazMat are adequately trained in the safe use of HazMat. Each organization is responsible for documenting employee HazMat training records. A Job Safety Analysis (JSA) as required by SHE Standard A10 may be included as proof of training of the hazards for new and non-routine tasks. The JSA shall be signed by all that developed or reviewed the analysis.

Employees who request hazardous materials must request an EESOH-MIS user access from **Environmental** and be trained in EESOH-MIS to create Material Authorization Requests (AF Form 3952).

Training for Base Operating Contractor personnel will be provided by the Base Operating Contractor Environmental Office.

## 7.0 INSPECTIONS/AUDITS

Periodic HazMat inspections shall be conducted by members of the HazMat Cell and Industrial Hygiene to verify compliance with the requirements of this standard. Inspection findings will be provided to the POC and the HAZMART.

## 8.0 REFERENCES

### AEDC SHE Standards

- A9, *Hazard Communication*
- D4, *Compressed Gas Cylinders*
- E14, *Ozone Depleting Substances*
- E16, *Polychlorinated Biphenyls (PCBs)*
- E18, *Managing Wastes Containing Chemical or Petroleum Products*

### Code of Federal Regulations

- 29 CFR 1910, *Appendix A, List of Highly Hazardous Chemicals, Toxics and Reactives*
- 29 CFR 1910, *Subpart H, Hazardous Materials (1910.101 to 1910.120)*
- 29 CFR 1910.106, *Flammable and Combustible Liquids*
- 29 CFR 1910.110, *Storage of Liquid Petroleum Gas*
- 29 CFR 1910.119, *Process Safety Management of Highly Hazardous Chemicals*
- 29 CFR 1910.1200, *Hazard Communication*
  
- 40 CFR 110, *Discharge of Oil*
- 40 CFR 301-303, *Emergency Planning*
- 40 CFR 302, *Designation, Reportable Quantities, and Notification*

40 CFR 304, *Emergency Notification*  
49 CFR 181, *Hazardous Materials Transportation*

The following are contract guidance documents.

AFI 32-4002, *Hazardous Material Emergency Planning and Response Compliance*  
AFI 32-7042, *Solid and Hazardous Waste Compliance*  
AFI 32-7044, *Storage Tank Compliance*  
AFI 32-7061, *Environmental Impact Process*  
AFI 32-7080, *Pollution Prevention Program*  
AFI 32-7086, *Hazardous Materials Management*

FS 313-D, *Material Safety Data, Transportation Data, and Disposal Data for Hazardous Materials Furnished to Government Activities*

## **9.0 ANNEXES**

- A. *Hazardous Material/Hazardous Waste Points of Contact*
- B. *Acronyms*
- C. *How to Add to AUL – Environmental Management Home Page* <https://aedcgisweb.arnold.af.mil/enviro/>
- D. *How to Print AUL – Environmental Management Home Page* <https://aedcgisweb.arnold.af.mil/enviro/>
- E. *Free Issue – Environmental Management Home Page* <https://aedcgisweb.arnold.af.mil/enviro/>

## **10.0 SUPPLEMENT**

*NFAC A321-0801-XSP E6 Hazardous Material Management*

## ANNEX A

## Hazardous Material/Hazardous Waste Points of Contact

Support Contractor, Hazardous Material	Frederick, Mike	Environmental, 454-3626
	McEntee, Letha	Safety and IH, 454-7749
Support Contractor, Hazardous Waste	Norman, Christina	Environmental, 454-7383
	Hicks, Jim	Environmental, 454-3628
	Partin, Ben	Environmental, 454-3521
Support Contractor, Safety and IH	Bragg, Bing	Safety and IH, 454- 3627
Support Contractor, Fire Prevention	VanCise, Daryl	Fire Prevention, 454-5643
Air Force	Carnley, Keith	AEDC/TSDCI, 454-6290
	Burns, Ruel	AEDC/TSDCI, 454-3296
	Fair, MSgt. Brian	AEDC/TSD-SG, 454-5635
	Raabe, Jim	AEDC/SE, 454-6529

**ANNEX B****Acronyms**

<b>AEDC</b>	Arnold Engineering Development Center
<b>AF</b>	Air Force
<b>AFI</b>	Air Force Instruction
<b>AU</b>	Authorized User
<b>AUL</b>	Authorized Users List
<b>CFR</b>	Code of Federal Regulations
<b>CMMS</b>	<b>Computerized Maintenance Management System</b>
<b>DOT</b>	Department of Transportation
<b>EHS</b>	Extremely Hazardous Substance
<b>EPCRA</b>	Emergency Planning and Community Right to Know Act
<b>ES</b>	Environmental Section
<b>ESOH</b>	Environmental, Safety, and Occupational Health
<b>FSC</b>	Flammable Storage Cabinet
<b>HazMat</b>	Hazardous Material
<b>HAZMART</b>	<b>Hazardous Materials Management Issue Center</b>
<b>HMMP</b>	Hazardous Materials Management Process
<b>HMMS</b>	Hazardous Materials Management System
<b>IH</b>	Industrial Hygiene
<b>MSDS</b>	Material Safety Data Sheet
<b>ODS</b>	Ozone Depleting Substance
<b>OSHA</b>	Occupational Safety and Health Agency
<b>POC</b>	Point of Contact
<b>SDS</b>	<b>Safety Data Sheet</b>
<b>SHE</b>	Safety, Health and Environmental
<b>WAM</b>	<b>Work and Asset Management</b>

## ANNEX C

### Accessing the EESOH-MIS

1. Go to the Team AEDC web page and click on “**AF Portal**” (Left hand column)
2. Click on the PERSONAL SPACE tab and look for – **My Applications: All**, box
3. Click on the first EESOH-MIS and then push “**Accept**” button.
4. Click **Hazardous Materials** and EESOH Home page will come up.

**NOTE:** Contact Base Operating Contractor Environmental Quality, 454-3626 or 454-4703, for permissions if you do not already have an EESOH-MIS account or if you have trouble accessing the EESOH-MIS.

### Adding a Material to your AUL in a current process

Go to “**Processes**” then “**Process Authorization**” (note: you must be in Shop Profile)

Push the gray “**search**” button on first line (note: this will give you all your Processes)

Click “**View all**” then find the Local Process Name that your material will go into.

Highlight the dot next to the process name and Click “**Edit/View**” above or below (note: you are in the Process that you want to add the material)

Push the gray “**Propose Change**” button in light blue line. (note: make sure all the info [red asterisks] under the brown “**Process**,” “**Details**,” “**Location**”, and “**Justification**” tabs are filled in.)

Push the brown “**Materials**” tab and then the gray “**Add Material**” button

Type in the MSN (stock #) in box and make sure it’s (verified) (that means it is in EESOH)

Push the “**continue**” button and **make sure you scroll down to add your draw amount**. Then scroll down and push **Save**

Push the brown “**Process**” tab and then the gray “**Submit for Authorization**” button.

Confirm that you want to Submit for Authorization and a notice in the highlighted area should read that your material has been submitted for Authorization.

# A321-0801-XSP E6 Hazardous Material Management

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 E6 “Hazardous Material Management”.

**References:** AEDC Safety Standard E6 – Hazardous Material Management at the AEDC NFAC Site.

NASA Ames Procedural Requirements APR 8800.3

**Scope:**

This supplement applies to the procurement, use, storage, and disposal of hazardous materials at NFAC. This supplement has the following purposes:

- Establish consistent policies, standards, and procedures for procurement, use, storage, and disposal of hazardous materials at NFAC.
- Comply with applicable environmental, health, and safety laws and regulations, specifically those listed as references in associated documents.
- Reduce the risk of hazardous materials release or spillage.
- Reduce the quantity and toxicity of chemicals used and hazardous waste generated.
- Allow tracking and accounting of NFAC hazardous materials for required reporting to state and federal agencies.

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 following chapters:

- Chapter 3 “Hazardous Materials Management”
- Chapter 4 “Hazardous Waste Management”
- Chapter 5 “Industrial Wastewater Management”
- Chapter 6 “Medical Waste Management”

Procurement of hazardous materials must be approved by NFAC Safety using the ATOM purchasing approval process.

NFAC is a satellite site for disposal of hazardous waste within the NASA Ames Facility. Hazardous waste disposal is handled by NASA Ames Contractor. For special hazardous waste disposal NFAC Safety works with NASA Environmental Group to arrange for the correct vendor and only a NASA Civil Servant can sign off the waste manifest.

## A321-0801-XSP E6 Hazardous Material 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 use the proper PPE specified on the MSDS
3. Customer provide the MSDS to NFAC Safety on any chemicals brought in for their test

III. NFAC Safety Engineer shall:

1. Review MSDS for procurement and approve through the ATOM purchasing system
2. Maintain adequate quantities of PPE
3. Ensure Chemical Inventory is maintained
4. Ensure MSDS are available to the staff

NFAC Staff shall:

1. Ensure that the supplement is followed
2. Store and label all chemicals properly
3. Utilize the proper PPE specified on the MSDS
4. Dispose of hazardous material properly through the NASA Hazardous Waste Stream
5. Complete training pertaining to your job assignment (no refresher required)
  - a. Hazard Communication for Chemical Users (NASA Satern Training)
  - b. Hazard Communication for Office Workers (NASA Satern Training)
6. Utilize the Building Emergency Action Plan (BEAP) for spill response and be currently trained on "Hazardous Waste and Spill Response"