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Aerospace Medicine

**HAZARD COMMUNICATION
(HAZCOM) PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: 6 AMDS/SGPB (Capt Hartman)
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This instruction implements Air Force Policy Directive 48-1, Aerospace Medical Program. It establishes the procedures and assigns responsibilities for implementing Air Force Occupational Safety and Health (AFOSH) Standard 161-21, Hazard Communication. It applies to all organizations who specify, procure, store, transport, package, handle, or use hazardous materials. It applies to all base and tenant units.

SUMMARY OF REVISIONS

Redundant material has been removed. Supervisors given the option of maintaining parts of the Workplace Specific Hazard Communications binder in other locations. Required contents of the binder have been clarified.

1. GENERAL INFORMATION: This instruction supplements and implements AFOSH Standard 161-21. Information on applicability, references, general procedures, and general program requirements are covered in AFOSH Standard 161-21

2. DEFINITIONS: See AFOSH Standard 161-21 for additional definitions.

2.1. Nonroutine Tasks. Tasks that are performed infrequently within a work place's normal activities or performed outside an individual's normal AFSC.

2.2. Organizational Occupational Health Coordinator. An individual assigned to a unit who is primarily responsible for coordinating the conduct of the occupational health program with medical personnel. This individual serves as a point of contact with the unit to schedule appointments, resolve problems, coordinate briefings, and make any other arrangements needed to ensure the smooth operation of the program for the unit.

2.3. Hazardous Material. Anything that, due to its chemical, physical, or biological nature, causes safety, public health, or environmental concerns. Any material that 1) is regulated as a hazardous

material per 49 CFR 173.2, Shippers - General Requirements for Shipment and Packaging, 2) requires a Material Safety Data Sheet (MSDS) per 29 CFR 1910.1200, OSHA Hazard Communications Standard, or 3) which, during end use, treatment, handling, packaging, storage, transportation, or disposal, meets or has components that meet or have the potential to meet, the definition of hazardous waste as defined by 40 CFR 261, Identification and Listing of Hazardous Waste, subparts A, B, C, or D. In general, any material that, because of its quantity, concentration, or physical chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment.

3. RESPONSIBILITIES:

3.1. Squadron commanders will:

3.1.1. Ensure supervisors and employees who handle, use, or are potentially exposed to hazardous materials in the course of official Air Force duties, are provided information and training on the Air Force Hazard Communication Program (HAZCOM) and the specific hazards in their work area.

3.1.2. Appoint, in writing, an organizational occupational health coordinator for each work place that uses or has the potential to use hazardous materials.

3.2. Workplace supervisors will:

3.2.1. Maintain a Workplace Specific Hazard Communications binder to include the tabs specified in **Attachment 1** and a workplace specific written hazard communication program (**Attachment 2**).

3.2.2. Order all potentially hazardous materials in accordance with AFI 32-7086 (e.g., through the Hazardous Material Pharmacy).

3.2.3. Ensure all materials are labeled according to AFOSH Standard 161-21. Do not accept any hazardous materials not properly labeled. Label containers used for redistribution of hazardous materials with the same information provided on the bulk container, unless the material is to be used completely, in one shift, by the same person filling the container.

3.2.4. Identify all operations, including nonroutine tasks, involving hazardous chemicals.

3.2.5. Ensure supervisor and worker hazardous materials training is accomplished.

3.2.6. Ensure each supervisor maintains a current inventory of all hazardous materials used and updates such list when new chemicals arrive or old chemicals are deleted. The listing shall be provided to the 6th Supply Squadron, Hazardous Material Pharmacy (6 SUPS/LGSDSH), 6th Aerospace Medical Squadron, Bioenvironmental Engineering Flight (BEF) (6 AMDS/SGPB), and the 6th Civil Engineer Squadron, Fire Protection Flight (6 CES/CEF).

3.2.7. Ensure all chemicals coming into the shop have appropriate MSDSs. The MSDS should either be in the HAZCOM folder/binder or accompany the material. Shops shall not accept hazardous materials for which they do not possess an MSDS.

3.2.8. Develop a lesson plan for specialized hazardous material training.

3.2.9. Provide specialized and comprehensive initial training to all workers.

3.2.10. Request technical training assistance from Public Health Flight, as deemed necessary.

3.2.11. Document Federal Hazard Communication Training Program (FHCTP) and Workplace Specific Federal Hazard Communication Training Program (WSFHCTP) in Section V of AF Form 55, Employee Safety and Health Record, as described in AFOSH Standard 161-21, paragraph 5e(7).

3.2.12. In accordance with AFI 91-301, dated 1 June 1996, provide the AF Form 55 to individuals to hand-carry to their next assignment when they transfer. Destroy the AF Form 55 one year after personnel separate or retire.

3.2.13. Develop procedures for deployment operations to include MSDSs, personal protective equipment (PPE), etc.

3.3. 6 AMDS/SGPB will:

3.3.1. Maintain and update the MSDS master file containing all hazardous chemicals used on MacDill Air Force Base. Ensure accessibility of this information to base emergency response agencies on a 24-hour basis. During nonduty hours, this information will be available from on-call 6 AMDS/SGPB personnel.

3.3.2. Determine, upon receiving notification of a new chemical from a work area supervisor, MSDS availability. If not available, BEF will attempt to obtain the MSDS from the manufacturer and determine if the material should be added to the hazardous material inventory. Materials should not be used until proper MSDS is obtained. BEF will try to obtain an MSDS from a manufacturer three times. If all attempts fail, 6 AMDS/SGPB will notify the Hazardous Material Pharmacy to discontinue ordering the particular material. The pharmacy will also be instructed to confiscate all materials for return or disposal.

3.3.3. Review new product MSDSs for completeness of safety and health information and forward these MSDSs to Armstrong Laboratory.

3.3.4. Validate hazardous materials inventories during the annual industrial shop survey, and certify existing chemical usage to minimize workplace hazards.

3.3.5. Review MSDSs with an employee, supervisor, or designated employee representative, and explain MSDS information, upon request.

3.3.6. Advise all units on proper chemical labeling.

3.3.7. Provide technical assistance to Public Health Flight (PHF) and other formal organizational training structures conducting supervisor HAZCOM training, as requested.

3.3.8. Assist workplace supervisors in development of work area hazardous materials inventory and listings of routine and nonroutine tasks involving hazardous materials.

3.3.9. Participate in the contracting process to ensure contract language is appropriate to meet Federal and HAZCOM standards prior to award of installation contracts.

3.4. The Public Health Flight (PHF) will:

3.4.1. Coordinate HAZCOM training requirements with appropriate agencies.

3.4.2. Provide supervisor and occupational health coordinator training on HAZCOM as requested.

3.4.3. When requested, 6 AMDS/SGPM will provide guidance and educational materials to supervisors on hazardous material for workers with a significant potential for exposure to hazardous materials within their work area.

3.4.4. Ensure the adequacy of hazardous materials training programs during annual shop visits.

3.4.5. Review AF Forms 55 for documented training during shop visits.

3.5. Hazardous Material Pharmacy will:

3.5.1. Ensure, upon receipt of hazardous materials, containers are identified, packaged, and labeled properly. Supply inspectors shall not accept improperly labeled containers. Ensure MSDSs accompany all shipments. Prior to issue, ensure all unlabeled hazardous materials are properly labeled using DD Form 2521 or DD Form 2522 (Hazardous Chemical Warning Labels).

3.5.2. Maintain at the Hazardous Material Pharmacy a master log of all MSDSs for hazardous materials used throughout the base.

3.5.2.1. Coordinate with BEF and the Bioenvironmental Engineering Flight (6 CES/CEV) for distribution and disposal of hazardous materials and waste.

3.5.2.2. Ensure shop has valid/current MSDS prior to delivery of material.

3.5.2.3. Provide MSDSs to users when requested.

3.6. The 6th Contracting Squadron will:

3.6.1. Ensure all contracts for which the Air Force locally procures potentially hazardous materials include clause 52.223-3, Hazardous Material Identification and Material Safety Data, of the Federal Acquisition Regulation (FAR) 23.303. Ensure post award conferences address hazardous materials in accordance with FAR Part 42.502(k).

3.6.2. Ensure contractors are advised of Air Force hazardous chemical operations they may encounter and protective measures needed in the normal course of their work on the premises during the post-award conference through consultation with the BEF.

3.6.3. Ensure copies of MSDSs for hazardous materials used by contractors are reviewed by BEF prior to use on base.

3.6.4. Ensure IMPAC cardholders and "Approving Officials" comply with AFI 32-7086 when purchasing hazardous or potentially hazardous materials.

3.7. The 6 CES will:

3.7.1. Maintain accurate records and drawings for all utility systems within the civil engineer's responsibility. Drawings will indicate best available location and contents of all pipes and utility systems.

3.7.2. Ensure all contracts are in compliance with AFOSH Standard 161-21 through coordination with the BEF.

4. POLICY AND PROCEDURES:

4.1. Labeling. All hazardous materials processed through procurement and distribution systems must have a label (or placard where appropriate) on each individual container (unit containers, intermediate

containers, and exterior packs) including those that serve as shipping containers. Labels shall clearly identify the product and the hazards associated with it. The label must meet the minimum requirements outlined in AFOSH Standard 161-21. All locally issued contractual documents for the purchase of hazardous materials will contain a provision requiring the suppliers of such items to label them as required by the OSHA HAZCOM Standard. This requirement will be incorporated into the procurement process subject to FAR guidelines. If a hazardous material is redistributed from bulk status to stationary containers (tanks) and/or portable containers, these containers must be labeled with the same chemicals and hazards that appear on the original container label. Although pipes and piping systems in the work area may not require labels, employees must be informed of the hazards of the substances in the pipes. The CES will provide information on the location and contents of pipelines and utility systems within the civil engineer's responsibility.

4.2. Contractor personnel will be advised of all hazardous materials, and their location, to which they could potentially be exposed as part of the post-award conference according to paragraph 7. of this instruction.

4.3. Material Safety Data Sheets:

4.3.1. BEF, Bldg 710, extension 8-3534, and the Hazardous Material Pharmacy maintain the MSDS master file containing information on all hazardous materials used on MacDill Air Force Base. MSDS information will be made readily available to all workers and emergency response agencies.

4.3.2. Workers with questions or those who desire clarification concerning MSDS information will contact BEF to establish a time during the worker's shift for review of the MSDSs. BEF personnel will review the MSDSs with the employee and provide an explanation of MSDS information.

4.3.3. All new chemicals or products having a new formula or manufacturer must be evaluated by BEF. If BEF determines the MSDS, or equivalent, is not available, BEF will obtain an MSDS using established procedures. Additionally, product importers, not limited to Base Supply, will request the supplier provide an MSDS before shipment of the product. BEF will request additional information if necessary and update the local and Air Force MSDS database. To locate MSDSs, the following information must be provided: national stock number (NSN), manufacturer (including full address and phone number), trade name, and part number.

5. EMPLOYEE INFORMATION AND TRAINING: There are two types of training: supervisor training and worker training. Public Health Flight conducts supervisor training and the supervisor conducts worker training. Worker training is divided into two categories, initial or pre-employment general hazardous material training, and specialized hazardous material training.

5.1. Supervisor training. Supervisors of work areas in which hazardous materials are used will receive training in accordance with AFOSH Standard 161-21/IG, Federal Hazard Communication Training Program (FHCTP), Trainer's Guide, and video program, or equivalent HQ AFMOA/SGOE approved program containing the elements of the FHCTP. This training will prepare the supervisor to train workers. 6 AMDS/SGPM or other formal training structure (e.g., maintenance trainers) will arrange and conduct this training as required.

5.2. Worker training.

5.2.1. Initial or pre-employment general hazardous material training is given to anyone likely to use hazardous materials in their work area. This training will be done using AFOSH Standard 161-21/TW, Federal Hazard Communication Training Program, Student's Workbook, and video program, or equivalent HQ AFMOA/SGOE approved program containing the elements of the FHCTP. It will be done before the worker handles, or is occupationally exposed to, hazardous materials. This training may be provided by the supervisor, the organization occupational health coordinator, or other formal organization training structure (e.g., maintenance trainers).

5.2.2. Specialized hazardous material training is given to workers who routinely use hazardous materials in their work area. This training addresses the specific hazards of the materials they use, the controls available to eliminate or reduce these hazards, and proper procedures for reading and utilizing MSDSs. This training must be provided to the worker upon initial assignment and when a new type of hazard is introduced into the work area. This training includes the recognition of signs and symptoms of exposure, available methods of exposure control, appropriate spill or emergency response actions, and disposal requirements.

5.2.3. Specialized hazardous material training will include the topics listed in [Attachment 3](#). Workplace supervisors shall develop a lesson plan specifically for the workplace.

6. HAZARDOUS CHEMICAL INVENTORY:

6.1. Work area supervisors and BEF develop a hazardous chemical inventory as part of the HAZCOM folder. BEF reviews this inventory at least annually during the industrial shop survey and provides each shop updated MSDSs and chemical inventories.

6.2. The HAZCOM binder will be maintained in the work area and updated by supervisors as necessary. When new chemicals are introduced into and/or removed from the work area, the supervisor shall ensure chemicals are added or deleted from the chemical inventory. Each supervisor is responsible for ensuring the HAZCOM binder is updated and readily available to each worker.

6.3. As a minimum, the inventory will include the identity of each hazardous chemical used in the work area.

7. CONTRACTOR OPERATIONS:

7.1. The Contracting Officer, with assistance from BEF and work area supervisors, if requested, will advise contractors of hazardous chemicals they may encounter and protective measures needed in the normal course of their work. The Contracting Officer will also tell the contractor that MSDS information is available through BEF for nationally stocklisted items and provide information on the labeling system.

7.2. At the post-award conference and subsequently during the contract performance period, the requiring activity quality assurance evaluator will advise work area supervisors and Air Force employees monitoring the performance of contractors of hazardous chemicals introduced by the contractor. The contractor is required to submit information on the use of hazardous materials according to FAR clause 52.223-3, Hazardous Material Identification and Material Safety Data. The use of the hazardous materials must be approved by BEF.

8. NONROUTINE TASKS INVOLVING HAZARDOUS MATERIALS:

8.1. The work area supervisor will list all nonroutine tasks performed in the work area that involve hazardous materials. The supervisor will ensure work area Operating Instructions (OI) thoroughly describe nonroutine tasks, associated hazards, and controls for the infrequent tasks performed in the work area. OIs are not required if technical orders or other official documents adequately describe these tasks. Supervisors will ensure workers review these procedures before performing any nonroutine tasks.

8.2. When workers temporarily perform duties outside their normal jobs, the supervisor of the activity will ensure these workers receive the following training prior to beginning the activity:

8.2.1. The initial FHCP described in paragraph 5e of AFOSH Standard 161-21, Hazard Communication, for workers not previously trained.

8.2.2. Supplemental training, as necessary, on work specific chemical hazards and associated controls.

8.3. The supervisor of the activity will forward a letter to the worker's formal supervisor describing the training conducted so the individual's AF Form 55 can be updated.

JAMES H. SOLIGAN, Brig Gen, USAF
Commander

Attachment 1**CONTENTS OF THE WORKPLACE SPECIFIC HAZCOM BINDER**

Content changes have been made from the previous HAZCOM instruction to give supervisors more flexibility in establishing the program. Because of this, certain tabs have been combined, deleted, or are now optional.

- Tab A: AFOSH Standard 161-21, Hazard Communication.
- Tab B: Workplace Specific Written HAZCOM Program
- Tab C: MacDill AFB Instruction (MACDI) 48-104.
- Tab D: Bioenvironmental Engineering Survey. There are some areas where a survey is not available, but a HAZCOM binder is still required. (Note 1)
- Tab E: Hazardous Chemical Inventory (to include stock numbers and manufacturers).
- Tab F: Operations/Tasks Involving Hazardous Chemicals. This should include required controls needed during the operation or task to minimize worker exposure. These controls could include personal protective equipment, respiratory protection, and engineering and administrative controls.
- Tab G: Nonroutine Tasks Involving Hazardous Chemicals. This should include required controls needed during the operation or task to minimize worker exposure. These controls could include personal protective equipment, respiratory protection, and engineering and administrative controls.
- Tab H: Material Safety Data Sheets (MSDS). (Note 1)
- Tab I: Spill Response Plan. This may be as simple as a short checklist that personnel are to follow when a chemical is spilled. (Note 1)
- Tab J: Workplace Specific HAZCOM Training Plan. This may be a lesson plan, plan of instruction, etc.
- Tab K: Training Documentation. (Note 1). This information may be kept in a computer database or other tracking mechanism. If this is the case, this tab is not needed.
- Tab L: Deployment Procedures (Optional). This section describes the use of hazardous materials at deployed locations.
- Tab M: Additional Information.

NOTE 1. This information may be kept in another location. If it is, simply state where the information can be found.

Attachment 2

DEPARTMENT OF THE AIR FORCE
 (your organization)
 MacDill Air Force Base, Florida 33621-1607

Written Hazard Communication Program
 (date)

YOUR SPECIFIC WORK AREA

WORKPLACE SPECIFIC WRITTEN HAZARD COMMUNICATION PROGRAM

COMPLIANCE WITH THIS INSTRUCTION IS MANDATORY

This written program provides information specific to the implementation of Air Force Occupational Safety and Health (AFOSH) Standard 161-21, Hazard Communication, at MacDill Air Force Base. A copy of this workplace specific written program including the AFOSH Standard 161-21, MacDill Instruction 48-104, Workplace Written Hazard Communication Program, the workplace specific hazardous chemical inventory, and a list of the workplace specific nonroutine tasks involving hazardous materials, will be maintained at each work area and accessible to all assigned personnel.

1. Material Safety Data Sheets (MSDS):

1.1. The 6th Aerospace Medicine Squadron, Bioenvironmental Engineering Services (BES) (6 AMDS/SGPB), MacDill Air Force Base, maintains the MSDS master file containing all hazardous chemicals used at MacDill Air Force Base. This master file consists of the Hazardous Material Information System (HMIS) and Occupational Safety and Health Administration (OSHA) Form 174, Material Safety Data Sheet, or equivalent forms.

1.1.1. To provide worker access to MSDS information, the location listed below has access to the HMIS and the ability to make copies of the MSDSs in the HMIS file.

Organization	Location	Extension
6 SUPS/LGSDH	Bldg 49	828-2582
CE/LGS (GOCESS)	Bldg 11	828-3056
6 TRNS/LGTM	Bldg 500	828-7703

1.1.2. For information on local purchase materials not listed in the HMIS file, the worker should contact BES. If the MSDS is not available, it will be requested from the manufacturer by BES and provided to the work area.

1.2. Workers desiring MSDS information and an explanation of the information contained in the MSDS should contact either their work area supervisor or BES at extension 8-3534. If BES is contacted, a mutually acceptable time will be arranged. Requests during holidays and times other than Monday - Friday, 0700 - 1630, should be directed to Emergency Services (ext 8-2334), who will contact the BES.

1.3. Supervisors will notify BES each time a new chemical is introduced to the work area. If BES determines HMIS, MSDS, or equivalent information is not available, BES will attempt to obtain the MSDS using established procedures. Supervisors who obtain an MSDS on their own must provide a copy to BES.

1.4. *In this work area, MSDSs for our current chemical inventory can be found* _____

2. Employee Information and Training:

2.1. Unit Commanders will ensure supervisors of work areas using hazardous materials receive training using AFOSH Standard 161-21.1G, Federal Hazard Communication Training Program (FHCTP), Trainer's Guide, and video program, or equivalent HQ USAF/SGPA approved program containing the elements of the FHCTP. These supervisors will be trained by Public Health Flight (PHF). Call 6 AMDS/SGPM, ext 8-5213, for scheduling.

2.2. Supervisors will ensure subordinate workers are trained on AFOSH Standard 161-21.1W, Federal Hazard Communication Training Program, Student's Workbook, and video program, or equivalent HQ USAF/SGPA approved program containing the elements of the FHCTP, before the workers handle or are occupationally exposed to hazardous materials. This training may be provided by the supervisor or other formal organization training structure (e.g., maintenance trainers). Supervisors should supplement this training to provide information on work area specific chemical hazards. Before presenting supplemental training, the supervisor will ensure appropriate agencies (BES (6 AMDS/SGPB), ext 8-3534, PHF (6 AMDS/SGPM), ext 8-5213, Base Safety (6th Air Refueling Wing (6 ARW/SE), ext 8-3383, and Environmental Management, 6th Civil Engineer Squadron (6 CES/CEV), ext 8-2567) review the information for technical accuracy.

2.3. *Current employee training is documented and located* _____
 _____.

3. Hazardous Material Inventory:

3.1. The hazardous material inventory for this area will be developed by the work area supervisor with the assistance of BES. The BES will review this inventory at least annually.

3.2. The supervisors will maintain the hazardous material inventory in the work area and update it as necessary. When new materials are introduced into the work area, the supervisor will consult with the BES to determine if the material should be added to the inventory.

3.3. As a minimum, the inventory will include the identity of each hazardous material used in the work area as it appears on the MSDS, the national/local purchase stock number, and the manufacturer's name. The inventory may be compiled from AF Forms 2761, "Hazardous Material Data," filed in the BES case file. However, proprietary information will not be included on the hazardous material inventory.

3.4. *The hazardous material inventory for _____ (office symbol) _____ can be found _____.*

4. Nonroutine Tasks Involving Hazardous Materials.

4.1. Nonroutine tasks are temporary duties outside an individual's normal Air Force Specialty Code (AFSC) or job series.

4.2. The work area supervisor will list all nonroutine tasks performed in this work area that involve hazardous materials. The supervisor will ensure work area Operating Instructions thoroughly describe nonroutine tasks, associated hazards, and controls for the infrequent tasks performed in this work area. Operating Instructions are not required if Technical Orders or other official documents adequately describe these tasks. Supervisors will ensure workers review these procedures before performing the nonroutine tasks.

4.3. When workers temporarily perform duties outside their normal jobs, the supervisor of the activity will ensure these workers receive the following training prior to beginning the activity:

4.3.1. The initial Federal Hazard Communication Training Program described in paragraph 5e of AFOSH Standard 161-21 for workers not previously trained.

4.3.2. Supplemental training, as necessary, on work area specific chemical hazards and associated controls.

4.3.3. The supervisor of the activity will forward a letter to the worker's formal supervisor describing the training conducted so the individual's AF Form 55 can be updated.

4.4. *The nonroutine tasks for _____(office symbol)_____ are as follows:*

5. Labeling Requirements:

5.1. Containers of hazardous material brought into or used within a specific work place will be labeled, tagged, or marked with the following information.

5.2. Identity of the hazardous material.

5.3. Appropriate hazard warnings (i.e., inhalation and ingestion hazard; flammable liquid. Use in a well-ventilated area. If spilled in eyes, irrigate with water immediately; if spilled on the skin, wash with water immediately; if exposed to high concentrations of vapors, remove victim to fresh air; if swallowed, provide medical attention immediately).

5.4. Name, address, and phone number of the manufacturer, importer, or other responsible party. If manufacturer information is unavailable, enter call Bioenvironmental Engineering Flight at 8-3534.

5.5. Labels provided by the manufacturer will not be removed, defaced or changed.

5.6. If hazardous substance is poured from its original container into a smaller container (such as a bucket or bottle) for use during a process, there is no requirement to label the smaller container PROVIDED THE SUBSTANCE IS CONSUMED DURING THE WORKSHIFT. However, any previous label on the container must be removed (i.e., plastic milk cartons, paint cans, squeeze bottles, etc.). If the substance will remain in the container for more than one workshift or used by more than one person, the container must be labeled.

5.7. If a container is too small to be labeled, a tag with the required information in paragraph 5.1. will be attached.

5.8. *All items in the _____(office symbol)_____ that are not in their original container are properly labeled.*

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Attachment 3

SPECIALIZED HAZARDOUS MATERIAL TRAINING

Specific worker training to be provided initially and annually by supervisory personnel. This training will address:

- Safety and health policy and procedures.
- Location of HAZCOM book and explanation of contents.
- Proper procedures for reading and utilizing MSDSs.
- Purpose and importance of labeling.
- Specific hazards of the materials used.
- Controls available to alleviate the hazards.
- Health information concerning substances used.
- Disposal/clean-up procedures.
- First aid in case of exposure.