

**BY ORDER OF THE COMMANDER
LOS ANGELES AIR FORCE BASE**

**LOS ANGELES AIR FORCE BASE
INSTRUCTION 48-104**



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Aerospace Medicine

HAZARD COMMUNICATION

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This instruction implements Air Force Policy Directive (AFPD) 48-1, *Aerospace Medicine Enterprise*. It establishes the procedures and responsibilities for implementing Air Force Instruction (AFI) 90-821, *Hazard Communication (HAZCOM)*, at Los Angeles Air Force Base, California. This instruction provides guidance on how to implement the Hazard Communication Program, establishes a prescribed format for all HAZCOM binders, and provides a format for work area-specific training plans. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF IMT 847, *Recommendation for Change of Publication*; route Air Force IMT 847s from the field through the appropriate career field functional manager's chain of command. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule located at <https://www.my.af.mil/afrims/afrims/afrims/rims.cmf>. Additionally, if the publication generates a report(s), alert readers in a statement and cite all applicable Reports Control Numbers in accordance with Air Force Instruction (AFI) 33-324. (**Note:** See **Attachment 1**, Glossary of References and Supporting Information, associated with this instruction).

SUMMARY OF CHANGES

Moved paragraph 1, References to Attachment 1, Glossary of References and Supporting Information. Changed paragraph 2, Introduction to Overview and moved sub-paragraph 2.2, Terms Defined to Attachment 1. Paragraph 2.2.6.1 moved to paragraph 3.3. Updated paragraph 2, Responsibilities – added ABG/CC. Updated organizational structure to comply with current structure (Group, Squadron, Flight, or Element).

1. OVERVIEW: This instruction covers the dissemination of information and required training for Air Force employees occupationally exposed to hazardous materials. This instruction does not apply to products, personnel and work areas specifically exempted in the introduction of AFI 90-821.

2. RESPONSIBILITIES:

2.1. The 61st Air Base Group commander is responsible for all aspects of the installation HAZCOM program. The commander will ensure the HAZCOM program is prepared, implemented, and its effectiveness assessed in work area/shops where hazardous chemicals are stored, used or handled.

2.2. Unit commanders will ensure supervisors and employees who handle, use or are potentially exposed to hazardous materials in the course of official Air Force duties are provided HAZCOM training prior to working with these materials and when work area/shop conditions or hazardous materials change

2.3. Supervisors:

2.3.1. Maintain a HAZCOM binder containing the following information in the following order. Contents of tabs may be maintained in another location and cross-referenced.

2.3.1.1. Tab A – HAZCOM Program Manager Appointment Memorandum.

2.3.1.2. Tab B – AFI 90-821.

2.3.1.3. Tab C – LAAFBI 48-104, Hazard Communication.

2.3.1.4. Tab D – AF Form 3952 Hazardous Chemical Inventory Listing and/or Copies.

2.3.1.5. Tab E – Non-routine Task Listing.

2.3.1.6. Tab F – Employee Education and Training Plan and/or Work-center-Specific HAZCOM program.

2.3.1.7. Tab G – BE Surveys.

2.3.1.8. Tab H – Site-Specific Spill Plan (see example at A).

2.3.1.9. Tab I – Additional Information (e.g., Quality Control Checklists).

2.3.1.10. Tab J – MSDSs (or cross-reference to separate binder).

2.3.2. Process an AF Form 3952, *Chemical Hazardous Material Request/Authorization*, or electronic equivalent through the Hazardous Material Pharmacy (HAZMART) for each new hazardous material.

2.3.3. Maintain current AF Form 3952 listing and/or copies, for each hazard material used/maintained at workcenter. Update listing and/or copy as necessary and review at least annually. Workcenters are required to meet this requirement no later than 90 days after the date this instruction is published.

2.3.4. Maintain a current MSDS for each hazardous material used in the work area.

2.3.5. Maintain a list of non-routine operations performed in the work area which involve the use of hazardous materials. Supervisors will also maintain operating instructions (OIs) or technical orders (TOs), which thoroughly describe non-routine tasks, associated hazards and controls. This list will include the task, frequency, chemical used, target organs and protective measures (see example at Attachment 2).

2.3.6. Develop a supplemental, work area specific employee education and training plan that provides detailed information on all areas required in paragraph 7 of this instruction. The training shall augment the standard HAZCOM program identified in AFI 90-821.

2.3.7. Maintain a copy of the work areas most recent Bioenvironmental Engineering (BE) survey, subsequent annual updates and other special surveys.

2.3.8. Complete AF Form 3952 and receive HAZMART approval prior to local purchase of hazardous materials.

2.3.9. Ensure all material, including by-pass material, is labeled in accordance with paragraph five of this instruction.

2.3.10. Ensure all personnel assigned to the work area receive HAZCOM training for their work area at Los Angeles AFB before employees handle or are occupationally exposed to hazardous materials.

2.3.11. Ensure all workers are provided comprehensive HAZCOM training. This and all additional hazard communication training will be documented on AF Form 55, "Employee Safety and Health Record".

2.3.12. Maintain all documentation required by this program. Ensure all employees have access to it during all work shifts and are aware of its location.

2.3.13. Using the "sample employee information and training plan" at attachment 3, conduct training and quality control checks of the work area HAZCOM program at least annually.

2.3.14. Determine whether the type and quantity of a hazardous material used in the workplace qualifies the item to be exempted as a "consumer use" item. Supervisors may wish to document items considered consumer use items on a separate inventory list.

2.4. 61 MDS/SGPB, BE:

2.4.1. Provide assistance to base personnel, as requested, in obtaining a current MSDS and in making "hazardous material" determinations.

2.4.2. Advise organizations and base personnel on labeling of containers.

2.4.3. Provide technical assistance to Public Health (PH) and other formal organizational training structures conducting supervisor training on HAZCOM.

2.4.4. Provide work area supervisors technical assistance in the development of the work area hazardous materials inventory and listing of non-routine tasks involving hazardous materials.

2.4.5. Review work area programs with industrial case files during routine industrial hygiene assessments.

2.4.6. Advise supervisors of the specific hazards of material through work area evaluations.

2.5. 61 MDS/SGPM, Public Health will:

2.5.1. Provide the supervisor Federal HAZCOM Training Program (train-the-trainer). This training must be documented on the AF Form 55 (or equivalent).

2.5.2. Provide technical assistance to work area supervisors on employee HAZCOM training.

2.6. Hazardous Material Pharmacy (HAZMART):

2.6.1. Upon receipt of hazardous materials, receiving personnel will inspect the material and review the MSDS. Personnel will examine containers to ensure materials are labeled or marked properly, displaying the identity of the hazardous material, the appropriate hazard warning and the name, address and phone number of the manufacturer, importer or other responsible party. If the MSDS is missing or the container is not properly labeled or marked, receiving personnel have the option to refuse the material or contact the supplier for the necessary paperwork.

2.6.2. In the event existing stock is found unlabeled, with labeling information required by AFI 90-821, receiving personnel will attach a *Hazardous Chemical Warning Label* (DD Form 2521 or DD Form 2522) or equivalent to satisfy labeling requirements.

2.7. SMC/PI Contracting Officer:

2.7.1. Comply with paragraph 9 of this instruction.

2.7.2. Advise contractors of hazardous chemicals used in Air Force operations they may encounter in the normal course of their work. The contracting officer will inform the contractor that MSDS information is available through the HAZMART.

2.7.3. At the pre-performance conference, and subsequently during the contract performance period, the requiring activity quality assurance personnel 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.

2.7.4. Ensure all contracts require compliance with Title 29, CFR, 1910.1200.

3. HAZARD DETERMINATION:

3.1. Los Angeles AFB will rely on the hazard determination of the supplier and/or manufacturer for purchase of potentially hazardous materials. For those potentially hazardous materials produced by AF components, the activity controlling the formulation will make the hazard determination.

3.2. Workplace supervisors are responsible for determining whether the type and quantity of a hazardous material used in the workplace qualifies the item to be exempted as a "consumer use" item in accordance with AFOSH Standard 161-21, paragraph g. BE will provide assistance, as necessary, to make this determination.

3.3. The following items are not considered hazardous materials and are exempt:

- 3.3.1. Hazardous wastes.
- 3.3.2. Tobacco.
- 3.3.3. Wood products.
- 3.3.4. Materials packaged for retail sale.
- 3.3.5. Personal food, drugs or cosmetics brought into the work area.
- 3.3.6. Consumer products used in small quantities for non-occupational uses.
- 3.3.7. Chemicals used for laboratory analytical processes.
- 3.3.8. Pharmaceuticals and biological materials, including serums and vaccines in final form.

4. MATERIAL SAFETY DATA SHEET (MSDS):

- 4.1. BE maintains the MSDS master file containing all hazardous chemicals used at Los Angeles AFB as part of the HAZMART. This master file consists of the Hazardous Material Information System (HMIS) and OSHA Form 174, *Material Safety Data Sheet* or equivalent forms.
- 4.2. The work area MSDS file or database (Tab J, HAZCOM binder) will be readily available to all workers. Supervisors must ensure access to workers during all work shifts.
- 4.3. BE is available and may be contacted for interpretation of information contained in an MSDS and/or assistance in procuring an MSDS from a manufacturer.

5. LABELS AND OTHER FORMS OF WARNING:

- 5.1. All hazardous material containers brought onto, or used within the confines of Los Angeles AFB will be labeled, tagged or marked with the following information:
 - 5.1.1. Identity of the hazardous materials (e.g., material name, stock number and/or part number).
 - 5.1.2. Appropriate hazard warnings (e.g., health, fire or reactivity hazards and severity as listed on the MSDS; areas of the body to protect, such as eyes, skin or respiratory tract).
 - 5.1.3. Name, address and phone number of the manufacturer, importer or other responsible party.
- 5.2. DD Form 2521 or DD Form 2522, when available, will be used as a uniform labeling system to meet the labeling requirements for:
 - 5.2.1. Existing stocks of unlabeled materials.
 - 5.2.2. Hazardous materials manufactured within the Air Force.
 - 5.2.3. Transferring, repackaging or distributing of bulk quantities of hazardous materials into other containers (breakdown quantities). The exception for this rule is when a material is placed in an unmarked container and used or returned to the original container after task completion or within one work shift, whichever is sooner.
 - 5.2.4. Re-labeling hazardous material containers in accordance with paragraph 5.1 above when labels have been accidentally defaced or lost.

5.3. The sources for this labeling information are:

- 5.3.1. HMIS labeling field.
- 5.3.2. Label on bulk or packaged containers.
- 5.3.3. Hard copy of the manufacturer's MSDS.
- 5.3.4. Manufacturer, importer, or other responsible party.

5.4. Label all tanks with the name of the material it contains. This will ensure non-compatible materials are not accidentally added to the tank or vat.

6. EMPLOYEE INFORMATION AND TRAINING:

6.1. Supervisors and employees who handle, use, or are potentially exposed to hazardous materials in the course of official Air Force duties must be provided training on the AF HAZCOM program, including training to address work area/shop-specific hazards prior to the use of hazardous chemicals. Supervisors will ensure the appropriate career field functional manager (i.e., PH, BE, base safety office, and fire department) review and approve the shop specific hazard training program for technical accuracy and completeness prior to implementation in the work area/shop. Contract supervisors and contractors shall be trained according to their specific contract provisions

6.2. Supervisors or other designated trainers must be trained and certified by Public Health before they are authorized to provide training to workers.

6.3. Prior to starting work, each newly assigned person will receive a health and safety briefing and orientation that includes the following information and training:

- 6.3.1. An overview of the requirements contained in the Hazard Communication Standard.
- 6.3.2. Location of the HAZCOM binder and MSDS file or database.
- 6.3.3. Hazardous materials present in the work area.
- 6.3.4. How to read labels and review MSDSs to obtain hazard information.
- 6.3.5. Physical and health risks of each hazardous chemical.
- 6.3.6. The symptoms of overexposure.
- 6.3.7. How to determine the presence and/or release of hazardous chemicals in the work area.
- 6.3.8. How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices and personal protective equipment.
- 6.3.9. Steps taken to reduce or prevent exposure to hazardous chemicals.
- 6.3.10. Spill response procedures and emergency procedures to follow if employees are exposed to hazardous chemicals.

7. HAZARDOUS CHEMICAL INVENTORY: All work centers will maintain a chemical inventory listing ([Attachment 5](#)). This listing must be kept current and must reflect a complete and accurate inventory of all hazardous materials used in the work area. A current listing may be obtained through the HAZMART.

8. CONTRACTOR OPERATIONS.

8.1. When an Air Force work area/shop uses hazardous chemicals in a way that contractor employees (e.g., a painting contractor working in an industrial shop) may be exposed, then the work area/shop written hazard communication program and access to MSDS must be provided to the contractors in accordance with 29 CFR 1910.1200(e)(2).

8.2. The Air Force requesting 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.

8.2.1. The contractor is required to submit information on use of hazardous materials according to FAR clause 52.223-3.

8.2.2. The contractor is responsible for their own HAZCOM program.

8.2.3. Contracting shall ensure that all contracts require compliance with Title 29, CFR, 1910.1200.

9. NON-ROUTINE TASKS INVOLVING HAZARDOUS MATERIALS:

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

9.1.1. Initial HAZCOM Training described in paragraph 6.3.

9.1.2. Supplemental training, as necessary, on specific chemical hazards that will be used or will be at the job site.

9.1.3. Measures the worker can take to reduce the risk of exposure at the job site and steps already instituted to reduce the risk (e.g., ventilation system).

9.1.4. Location of the MSDSs for chemicals present.

9.1.5. Information contained on the labels.

9.2. Forward a letter to the worker's formal supervisor describing the training conducted so the individual's AF Form 55 can be updated.

ELLEN M. PAWLIKOWSKI, Lt Gen, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 90-821, *Hazard Communication (HAZCOM)*, 30 March 2005

AFI 32-7086, *Hazardous Materials Management*, 1 November 2004

AFPD 48-1, *Aerospace Medicine Enterprise*, 23 August 2011

AFOSH Standard 161-21, *Hazard Communication*

29 CFR 1910.1200, *Occupational Safety and Health Standards*

Prescribed Forms

No forms are prescribed in this publication

Adopted Forms

AF Form IMT 55, *Employee Safety and Health Record*

AF Form 847, *Recommendation for Change of Publication*

AF Form IMT 3952, *Chemical Hazardous Material Request/Authorization*

DD Form 2521, *Hazardous Chemical Warning Label (8-1/2 x 11)*

DD Form 2522, *Hazardous Chemical Warning Label (4x6)*

OSHA Form 174, *Material Safety Data Sheet (MSDS)*

Abbreviations and Acronyms

AFEMIS—Air Force Environmental Management Information System

AFHCP—Air Force Hazard Communication Program

AFI—Air Force Instruction

AFOSH—Air Force Occupational Safety and Health

AFSC—Air Force Specialty Code

BE—Bioenvironmental Engineering

FAR—Federal Acquisition Regulation

HAZCOM—Hazard Communication

HAZMAT—Hazardous Material

HMIS—Hazardous Material Information System

MSDS—Material Safety Data Sheet

OI—Operating Instruction

PH—Public Health

TO—Technical Order

Terms

By-pass Material— Material going directly to the user rather than to the supply receiving function.

Chemical— Any element, chemical compound or mixture of elements or compounds in a solid, liquid or gaseous form.

Container— Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank or the like that contains a hazardous chemical. For purposes of this instruction, pipes or piping systems and engines, fuel tanks or other operating systems in a vehicle are not considered to be containers.

Employee— A worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers (e.g., office workers, finance tellers) who only encounter hazardous chemicals in non-routine, isolated instances are not covered by this instruction.

Exposure or Exposed— An employee who is subjected to a hazardous chemical through any route of entry (inhalation, ingestion, skin contact or absorption) in the course of employment. Also includes potential, accidental or possible exposure.

Hazardous Chemical or Hazardous Material— Any material that is a physical or health hazard and requires a Material Safety Data Sheet (MSDS), as defined in Federal Standard 313, unless excluded.

Label— Any written, printed or graphic material displayed on or affixed to containers of hazardous materials.

Material— Same definition as chemical.

Material Safety Data Sheet (MSDS)— Written or printed material concerning hazardous material that is prepared according to Title 29, CFR, 1910.1200.

Non-routine Tasks— Tasks included within a work area's normal activity but performed infrequently, (i.e. cleaning with a solvent, changing the solvent from a tank or cleaning up a spill, plus temporary duties outside an individual's normal Air Force Specialty Code or job series).

Use— To package, handle, react or transfer.

Work Area— A room or defined space in a workplace where hazardous materials are produced or used and where employees are present.

Workplace— An establishment, job-site or project at one geographical location containing one or more work areas. For the purposes of this instruction, the workplace is defined as all facilities located within the boundaries of Los Angeles AFB.

Worker— Same definition as employee.

Attachment 2

EXAMPLE NON-ROUTINE TASK LISTING FORMAT

NON-ROUTINE TASK	FREQUENCY	CHEMICALS USED	TARGET ORGANS	PROTECTIVE MEASURES
a. Bay Orderly	Annual	Various Household Chemicals	Varies	Nitrile rubber gloves, eye goggles, good personal hygiene
b. Lead & Copper	Annual	Nitric Acid	Eyes, Skin, Teeth, Respiratory System	Face shield, Butyl rubber gloves
c. Total Trihalomethane	Annual	Sodium Thiosulfate	None	Personal hygiene

Attachment 3

SAMPLE EMPLOYEE INFORMATION AND TRAINING PLAN

A3.1. This document provides supervisory personnel with the training requirements for the Hazard Communication (HAZCOM) program for all personnel assigned to this work area. Upon completion of this training, personnel must update their AF Form 55 such training.

A3.2. Overview:

A3.2.1. The Occupational Safety and Health Administration (OSHA) issued the Hazard Communication Standard, which eventually became Title 29, CFR, 1910.1200, Hazard Communication. It states that every individual has the right to know what hazards are faced on the job and how to be protected against them. Air Force Instruction 90-821, Hazard Communication, outlines the Air Force program.

A3.2.2. In 1983, OSHA issued the Hazard Communication Standard for manufacturing operations to help protect you. In 1987, OSHA revised this standard and expanded it to include all workplaces where personnel are exposed to hazardous chemicals.

A3.2.3. The goal of the Hazard Communication program is to reduce the incidence of occupational illness and injury caused by hazardous chemicals in the workplace.

A3.3. Material Safety Data Sheets (MSDSs) are located with the HAZCOM program. All documents (including the chemical inventory, non-routine task listing, and written plan) are contained in the HAZCOM binder, located _____. Work area personnel are trained on how to read material labels and MSDSs during technical training and initial work area orientation.

A3.3.1. A Material Safety Data Sheet (MSDS) contains nine major sections. The sections are divided as follows: Material Identification, Ingredients and Hazards, Physical Data, Fire and Explosion Data, Reactivity Data, Health Hazard Data, Spill and Disposal Methods, Special Protection Information, and Comments Section. All companies follow this standard format.

A3.3.1.1. Section I contains the material identification and general information, like company name, address, material name with synonyms, and an emergency phone number.

A3.3.1.2. Section II lists all hazardous ingredients in the chemical mixture. Many chemical materials are mixtures. Not only does this section list the ingredients, but also states the percentages of each ingredient found in the total mixture. For example, acetic acid may contain two ingredients, water and acetic acid, where water makes up 72% of the mixture and 28% is acetic acid. This accounts for 100% of the mixture (72 + 28). Knowing percentages is helpful when an air sample is accomplished to determine the airborne concentration of the hazard.

A3.3.1.3. Section III contains physical data. Physical data is characterized by appearance, odor, a boiling point, freezing point, vapor pressure, solubility, and specific gravity. The important data in this section are vapor pressure, and boiling point. For instance, methylene chloride has a boiling point of 39°C (102°F) and has a high vapor

pressure. Due to the physical properties, employees should be aware that this material must be stored in a cool, vented, and flame free environment.

A3.3.1.4. Section IV provides data on fire and explosion information, such as what type of fire extinguishing media to use and whether or not any toxic vapors are released during a fire. If so, it states the personal protective measures fire fighters should use. It is important that this section be reviewed prior to using the chemical.

A3.3.1.5. Section V provides reactivity data. This section simply describes “what can be stored with what”. An example is storing acids with bases. You would not want to store sodium hydroxide (lye) in the same cabinet with sulfuric acid (battery acid). If one of those containers broke, it would react vigorously, neutralize your chemicals, and produce hydrogen gas. It could produce a dangerous situation.

A3.3.1.6. Section VI contains health hazard information, emergency and first aid procedures. The data found in this section describe the route of entry (e.g., skin, eyes, respiratory) and the target organs or systems (e.g., liver, lungs, and central nervous system) and first aid procedures.

A3.3.1.7. Section VII provides information on the proper disposal of the material. This section tells you how to neutralize a chemical spill, how to dispose of the material, and who to contact if a spill occurs. Hazardous chemical wastes (flammable, toxic, etc.) cannot be poured down the drain or placed in the regular trash. Lastly, call 61 CELS/CEV (653-5494 or 653-5491) to coordinate removal and disposal of this waste.

A3.3.1.8. Section VIII provides important information on specific personal protective equipment such as respiratory protection, rubber boots, or eye goggles. It also provides information on the necessity for engineering controls such as a ventilation system.

A3.3.1.9. Section IX is used for any additional comments the manufacturer deems necessary for the user. The key is educating the user on the product to prevent injury or illness.

A3.4. A listing of all hazardous chemicals is provided as part of the HAZCOM program. The actual chemicals are stored in _____.

A3.4.1. The HAZCOM program requires the use of warning labels that contain the name and identity of the chemical, and appropriate hazard warnings.

A3.4.2. Labels on containers that leave the work area must contain the name and address of the responsible party. The warning label is often your first source of information about chemical hazards. The name and identity on the label can be used to find the right MSDS, where you will find additional information.

A3.5. Work-center HAZCOM binder MSDSs provide the physical and health risks of each hazardous chemical along with the signs and symptoms of overexposure and the method of determining the presence or release of a hazardous material in the work area.

A3.6. Work area personnel reduce or prevent exposure to hazardous chemicals by using appropriate personal protective equipment (PPE) and by being familiar with the signs and symptoms of exposure to the materials they are working with. Three basic methods for controlling chemical hazards are engineering controls, personal protective equipment, and administrative controls.

A3.6.1. Engineering controls include substitution, isolation, general ventilation, and local exhaust ventilation. Substitution applies when a chemical, process, or piece of equipment with fewer hazards can replace an existing one. Isolation refers to using an enclosure, barrier, or a safe distance to separate workers from the exposure hazard. Common examples of this are machine enclosures, enclosed control rooms, and splashguards. General ventilation is mixing an airborne hazard with fresh air to reduce exposure levels. This only applies when hazards have low toxicity and mix readily with air. Some examples of general ventilation are fans and vents. Local exhaust ventilation captures an airborne hazard as it is released and takes it out of the work area to eliminate the exposure.

A3.6.2. Prioritizing how we control exposures is accomplished by looking at the source, path and receiver. Controlling the receiver is least desirable, but most often used. PPE is the most common means of protecting an individual against exposures (physical and health hazards). Some examples of PPE include gloves, aprons, eye and face protection, and respirators. To protect you, the PPE must be matched to the specific hazard. For example, cloth gloves are useless for protection against a corrosive liquid. Personal protective equipment is useless unless you wear it. Proper fit, correct use, and routine inspection are essential.

A3.6.3. Administrative controls include documentation, information, and training in safe work practices, good housekeeping, and most of all, monitoring. This applies to personnel and equipment. The Hazard Communication Program is an effective administrative control to ensure workers are informed on the work area hazards.

A3.7. Steps taken to reduce exposure. Steps are described in the BE survey reports, located in Tab G of the HAZCOM binder. The reports address PPE and administrative controls to reduce the risk of exposure to all workers. Additionally, all personnel are provided HAZCOM training and are always discussing potential situations as well as how to best deal with such situations.

A3.8. Work area personnel do/do not (circle appropriate word) use large quantities of hazardous materials. Reference [Attachment 4](#) for specific spill procedures.

A3.9. Supervisors may use the following review questions to test workers' knowledge of the Hazard Communication Program.

Table A3.1. HAZCOM Program Review Questions.

<i>QUESTION</i>	<i>ANSWER</i>
What chemicals could present a potential health hazard used by your shop?	
What is a MSDS?	
Where are the MSDSs for your shop kept?	
Where is the Hazardous Material Inventory?	
What type of PPE is used in your shop?	
Who is your HAZCOM program manager?	
What procedures do you follow in the event of a small spill? A large spill? What is the difference?	

Attachment 4**SAMPLE HAZARDOUS MATERIAL SPILL CLEANUP PROCEDURES**

A4.1. Spill Management: If a hazardous chemical spill should occur, the following steps shall be followed:

A4.1.1. For Small Spills.

A4.1.1.1. Restrict traffic through the area.

A4.1.1.2. Shut any doors adjacent to the spill area.

A4.1.1.3. Notify a supervisor.

A4.1.1.4. Seek medical attention if needed from 61 MDOS/Primary Care.

A4.1.1.5. Contact BE (653-6539/6636/6644) to assess spill.

A4.1.1.6. After BE's assessment and recommendation, clean small spill with section's chemical spill kit located in Room 2A13.

A4.1.1.7. Don appropriate PPE as directed by spill kit's manufacturer.

A4.1.1.8. Follow the directions located inside the chemical spill kit.

A4.1.1.9. Disposal of the spill will be coordinated with 61 CELS/CEV(653-5494/ 5491).

A4.1.2. For Large Spills.

A4.1.2.1. Restrict traffic through the area.

A4.1.2.2. Shut any doors adjacent to the spill area.

A4.1.2.3. Notify a supervisor.

A4.1.2.4. Seek medical attention if needed from 61 MDOS/Primary Care.

A4.1.2.5. Contact BE (653-6539/6636/6644) to assess spill.

A4.1.2.6. Immediately call the 61 SFS/Law Enforcement Desk (653-2121) and request assistance from the Spill Response Team.

A4.1.2.7. Obtain a MSDS sheet for specific information on spill management.

A4.2. Removal and Disposal.

A4.2.1. Hazardous chemical wastes (flammable, toxic, etc.) cannot be poured down the drain or placed in the regular trash.

A4.2.2. Call 61 CELS/CEV (653-5494 or 653-5491) to coordinate removal and disposal of this waste.

A4.3. Emergency Phone Numbers.**Table A4.1. Emergency Phone Numbers.**

<i>AGENCY</i>	<i>PHONE NUMBER</i>
Bioenvironmental Engineering	653-6539/6636/6644
Civil Engineering's Environmental	653-5494/5491
Fire Department	911
Law Enforcement	653-2121
Public Health	653-6623/6778/6638
Safety	653-1417

Attachment 5

EXAMPLE CHEMICAL INVENTORY

Figure A5.1. Example Chemical Inventory.

TABLE	NATIONAL STOCK NUMBER	MANUFACTURER	NOMENCLATURE	QUANTITY USAGE	DISPOSAL METHOD
1	N/A	Scott Specialty Gases	1,3,5 Tris (trifluoromethyl) benzene, Bromopentafluorobenzene in Nitrogen	Entire bottle during HAPSITE use	Turned in to 61 CELS/Environmental
2	N/A	Scott Specialty Gases	Nitrogen	Entire bottle during HAPSITE use	Turned-in to 61 CELS/Environmental
3	6510014250026	Medline Industries, Inc.	Alcohol Prep Pads	Varies - to clean HAZMAT ID in between samples	Trash can
4	N/A	TSI Incorporated	Isopropyl Alcohol	Varies – to fill wick container of the M41 and Portacount	Used in process
5	N/A	Allegro Industries	Alcohol free Towlettes	Varies – for quick “clean” of gas-masks and respirators	Trash can
6	N/A	Hach Company	DPD Total Chlorine Reagent	Varies – used to test for FAC during water sampling	Diluted with water and disposed in drain
7	N/A	Hach Company	DPD Total Chlorine Reagent	Varies – used to test for	Diluted with water and disposed in drain

				TAC during water sampling	
8	N/A	Hatch Company	Phenol Red Indicator Solution	Varies – used to test for pH during water sampling	Diluted with water and disposed in drain
9	N/A	TSI, Incorporated	Salt Tablets	1 Tablet (no more 10 times/year)	Used in process