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Aerospace Medicine

**WRITTEN HAZARD COMMUNICATION
PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: 374 AMDS/SGPB
(Maj G. I. Moreno-Fergusson)
Supersedes 374 AWI 48-106, 12 November 1996

Certified by: 374 MDG/CC (Col M. B. Matarese)

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This instruction implements 29 CFR 1910.1200, *Occupational Safety and Health Administration (OSHA) Standards-Hazard Communication*, and Air Force Policy Directive (AFPD) 48-1, *Aerospace Medical Program*. It is intended to reduce the incidence of chemically induced occupational illness and injury by informing employees of the hazards associated with, and proper preventive measures required when using or handling hazardous materials in the workplace. This instruction serves as the workplace written program for Yokota Air Base (AB) required by 29 CFR 1910.1200. It supersedes 374 AWI 48-106 dated 12 November 1996.

SUMMARY OF REVISIONS

Updates offices symbols. Updates responsibilities (paragraph 3.). A bar (|) indicates revisions from the previous edition.

1. Hazard Determination. Yokota AB will rely on the hazard determination of the supplier or manufacturer for potentially hazardous materials purchased for use. All requirements of paragraph 4. apply unless one of the exceptions in paragraph 2. is met.

2. Exceptions. This instruction does not apply to the following materials:

2.1. Hazardous waste.

2.2. Wood or wood products.

2.3. Consumer products. These products are excepted for use in a workplace when their use is in the same manner as normal consumer or household use, and which use results in a duration and frequency of exposure that is not greater than exposures experienced by consumers. This will be a case-by-case judgment.

2.4. Warehousing. These products are excepted as long as employees only handle materials in sealed containers that are not opened under normal conditions.

2.5. Pharmaceuticals. Products such as vaccines, serums, and blood products are generally excepted; however, chemotherapeutic agents are not excepted.

2.6. Laboratories. These products are excepted as specified in 29 CFR 1910.1200.

3. Responsibilities.

3.1. The 374th Airlift Wing Commander (374 AW/CC). Establishes a Yokota AB Hazard Communication (HAZCOM) program consistent with 29 CFR 1910.1200.

3.2. Unit Commanders. Ensure workplace supervisors establish and maintain HAZCOM programs that fulfill the specific requirements identified in paragraph 4. Appoint unit safety representatives and ensure they evaluate workplace HAZCOM programs for compliance and effectiveness during routine inspections.

3.3. Workplace Supervisors:

3.3.1. Establish and maintain HAZCOM programs that fulfill the specific requirements identified in paragraph 4.

3.3.2. Ensure employees can demonstrate an effective understanding of the hazards associated with, and proper protective measures required when using or handling hazardous materials in their workplace.

3.3.3. Ensure all personal protective equipment is evaluated by 374th Aerospace Medicine Squadron Bioenvironmental Engineering Flight (374 AMDS/SGPB) and it is in the certified equipment listing.

3.3.4. Ensure workers temporarily performing duties outside their normal jobs (i.e., details) receive appropriate HAZCOM training prior to performing these duties. This includes summer hires, contractors, or augmentees to the section.

3.3.5. Conduct training under the direction of the 374 AMDS Public Health Flight (374 AMDS/SGPM).

3.3.6. Compile a Job Safety Analysis (JSA) in accordance with (IAW) Air Force Occupational Safety and Health Standard (AFOSHSTD) 91-501, *Air Force Consolidated Occupational Safety Standard*, as outlined in [Attachment 1](#) and forward copies of it to 374 AW Safety (374 AW/SE), 374th Civil Engineer Squadron Fire Protection Flight (374 CES/CEF), and 374 AMDS/SGPB. Each JSA must contain the quantities used, stored, and where the items are stored.

3.4. Employees.

3.4.1. Use hazardous materials only after receiving workplace-specific HAZCOM training and demonstrating an effective understanding of the hazards associated with and the proper protective measures required when handling these materials.

3.4.2. Notify shop supervisors of any issues regarding hazardous materials that can pose either a perceived or real hazard to the employees.

3.5. Unit Safety Representatives. Evaluate workplace programs for HAZCOM program compliance during routine inspections. Advise unit commanders, 374 AMDS/SGPB, and 374 AMDS/SGPM of

HAZCOM compliance problems as appropriate. Assist in developing HAZCOM effectiveness measures, and periodically assess program effectiveness.

3.6. The 374 AMDS/SGPB.

3.6.1. Evaluates HAZCOM program compliance during routine industrial hygiene surveys, hazardous material purchase request (AF Form 3952, **Chemical/Hazardous Material Request Authorization**, AF Form 3000, **Material Approval Submittal**, and local purchase request forms), accident/incident investigations, etc.

3.6.2. Advises unit commanders on HAZCOM compliance problems. Provides evaluation of personal protective equipment, respiratory protection, engineering controls, hazardous material usage and disposal.

3.6.3. Provides Material Safety Data Sheets (MSDS) to supervisors upon request. Reviews and explains MSDSs to workers as necessary. Provides MSDS information to medical providers and toxicological analysis of the data. If possible, provides/researches suitable less hazardous substitutes.

3.6.4. Assists 374 AMDS/SGPM in developing HAZCOM training and effectiveness measures upon request.

3.6.5. Writes and coordinates 374 AWI 48-106.

3.7. The 374 AMDS/SGPM. Advises and assists installation and unit commanders on establishing effective HAZCOM training. Coordinates review of workplace-specific training plans, and approves workplace-specific training content and methods. Oversees development of HAZCOM effectiveness measures.

3.8. The 374 CES/CEF. Provides technical assistance for HAZCOM training, and reviews workplace-specific training plans for accuracy upon request. Informs 374 AMDS/SGPB and 374 AMDS/SGPM of HAZCOM compliance problems identified during inspections as appropriate.

3.9. The 374 AW Ground Safety (374 AW/SEG). Informs 374 AMDS/SGPB and 374 AMDS/SGPM of HAZCOM compliance problems identified during inspections as appropriate.

3.10. The 374th Logistics Readiness Squadron Cargo Inbound Element (374 LRS/LGRDCI). The 374 LRS Distribution Flight (374 LRS/LGRD) will ensure containers received are properly labeled. If containers are not properly labeled, the inspector should not accept the material. If accepted, the material must be properly labeled using DD Forms 2521 or 2522, **Hazardous Chemical Warning Label**, following the guidance in AFOSHSTD 161-21, *Hazard Communication*.

3.11. The 374 LRS Hazardous Material (HAZMART) (374 LRS/LGRDMH). Provides MSDSs to employees for all hazardous materials issued through 374 LRS/LGRDMH. When ordering new hazardous materials not loaded in the Standard Base Supply System (SBSS), ensure a copy of the MSDS is available prior to procurement.

3.12. The 374th Contracting Squadron (374 CONS). When contracting for hazardous materials, ensures the contractor provides an MSDS translated into English. These MSDSs will be forwarded to 374 AMDS/SGPB.

3.13. Procuring Individuals. Individuals procuring hazardous materials need to positively identify, in their supply request, any and all hazardous materials.

4. Specific Requirements.

4.1. Written HAZCOM Program. Each workplace using or handling hazardous materials will maintain a copy of 374 AWI 48-106. This instruction serves as the workplace written program required under 29 CFR 1910.1200, and it will be maintained in the workplace HAZCOM binder.

4.2. AFOSHSTD 161-21. A copy of the current AFOSHSTD on HAZCOM will also be maintained in the workplace HAZCOM binder. The current guidance is in AFOSHSTD 161-21. This standard is under revision, and updated guidance will be published in the near future.

4.3. JSA. Workplace supervisors will identify the tasks where hazardous materials are used, personal protective equipment required, method in which the material is to be used, and machine that uses it (if applicable). The JSA must follow the format outlined in [Attachment 1](#). A JSA is needed for every process performed in the shop.

4.4. Hazardous Chemical Inventory. Workplace supervisors will ensure an inventory of all hazardous chemicals is compiled and maintained in the HAZCOM binder. As a minimum, this inventory will identify the manufacturer, chemical or product name, national stock number (NSN), and container size. Tracking quantities used, amounts on-hand, and identifying the processes where the chemicals are used is also strongly encouraged. This inventory must be dated and kept current. The hazardous chemical inventory should be numbered in the order in which the MSDSs are filed.

4.5. Non-routine Task Listing.

4.5.1. Non-routine tasks are:

4.5.1.1. Those tasks included within a workplace's normal activities but performed infrequently; for example, cleaning a solvent tank and changing the solvent.

4.5.1.2. Temporary duties outside an individual's normal Air Force Specialty Code or job series.

4.5.2. The supervisor will prepare a list of non-routine tasks or operations (involving hazardous materials) performed in the work area. This list will be dated, kept current, and maintained in the HAZCOM binder. This listing will also identify standard operating procedures (SOP), operating instructions (OI), or Technical Orders (TO) governing non-routine tasks involving hazardous materials. If after discussions with the workers, it is agreed that no non-routine tasks are performed in the work area, the absence of non-routine tasks will also be documented. Supervisors will prepare OIs thoroughly describing non-routine tasks, associated hazards, and controls if a TO or other document does not adequately describe these tasks.

4.6. MSDS. Supervisors are responsible for ensuring MSDSs are available for each hazardous chemical used within their respective work centers. These MSDSs will also be maintained in the HAZCOM binder. If an MSDS is not available for a newly procured chemical, the supervisors should not accept the chemical until an MSDS is obtained. MSDSs can be obtained by contacting 374 AMDS/SGPB or 374 LRS/LGRDMH.

4.7. Labels and Other Forms of Warning.

4.7.1. The workplace supervisor will ensure each container of hazardous chemical in the workplace is labeled, tagged or marked with the identity of the hazardous chemical contained therein; the appropriate hazard warning; and the name and address of the manufacturer, importer, or other responsible party.

4.7.2. The workplace supervisor will ensure existing labels on incoming containers of hazardous chemicals are not removed or defaced unless the container is immediately marked with the required information.

4.7.3. The workplace supervisor will ensure transfer containers, vats, tanks, and other containers filled with hazardous materials are properly labeled IAW AFOSHSTD 161-21.

4.7.4. DD Forms 2521 or 2522, signs, placards, process sheets, batch tickets, or other such written materials will be used to label these containers IAW AFOSHSTD 161-21.

4.8. Employee Information and Training.

4.8.1. Supervisor "Train the Trainer" Training. Unit commanders will ensure all supervisors of work areas using hazardous materials receive training on the Federal Hazard Communication Training Program (FHCTP) using AFOSHSTD 161-21, 1G, *The FHCTP Trainer's Guide*, and the accompanying video program. 374 AMDS/SGPM provides this training quarterly. The date and time of quarterly training will be placed on the commander's access channel at least 1 month in advance.

4.8.2. Initial FHCTP Training. Initial FHCTP training should have been conducted at the appropriate AF technical training school, and documentation of this training should be available. If initial FHCTP training documentation is not available, the workplace supervisor should conduct initial training using AFOSHSTD 161-21, 1W. In all cases, the workplace supervisor must ensure this training has been done and that it is documented as "Initial FHCTP Training" in section V on the AF Form 55, **Employee Safety and Health Record**, for each assigned worker.

4.8.3. Workplace-Specific FHCTP Training.

4.8.3.1. Supervisors will develop workplace-specific training plans and submit them to 374 AMDS/SGPM for approval. Each workplace will coordinate these training plans with other base agencies such as 374 AW/SEG, 374 AMDS/SGPB, Environmental Management, and 374 CES/CEF, as appropriate. The industrial hygiene surveys performed by 374 AMDS/SGPB and the shop specific occupational health education materials available from 374 AMDS/SGPM are excellent sources of information for workplace-specific training plans.

4.8.3.2. Supervisors will conduct workplace-specific training for all employees using hazardous chemicals at the time of their initial assignment and whenever a new hazard is introduced into their work area. As a minimum, workplace-specific training will be conducted annually to increase employee hazard awareness and enhance HAZCOM effectiveness.

4.8.3.3. Supervisors will document all workplace-specific training as "Workplace-Specific FHCTP Training" in section V on the AF Form 55 for each assigned worker.

4.8.4. Minimum Employee Information and Training Requirements.

4.8.4.1. Employees shall be informed of:

4.8.4.1.1. The requirements of this section.

4.8.4.1.2. Any operations in their work area where hazardous chemicals are present.

4.8.4.1.3. The location and availability of the written HAZCOM program, including the required list of hazardous chemicals and MSDSs required by this instruction.

4.8.4.2. Employee training shall include at least:

4.8.4.2.1. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by 374 AMDS/SGPB, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.).

4.8.4.2.2. The physical and health hazards of the chemicals in the work area.

4.8.4.2.3. The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as: appropriate work practices, emergency procedures, and personal protective equipment to be used.

4.8.4.2.4. The details of the Yokota AB HAZCOM program, including an explanation of the labeling system, the MSDS, and how employees can obtain and use the appropriate hazard information.

5. HAZCOM Program Effectiveness. This is a performance-oriented instruction. The primary focus of this instruction is to reduce the incidence of chemically induced occupational illnesses and injuries by informing Yokota AB personnel of the hazards associated with, and the protective measures required when using or handling hazardous materials in their workplaces. Program effectiveness will be assessed by observing work practices, testing worker HAZCOM knowledge, and measuring occupational illness and injury rates.

MARK O. SCHISLER, Colonel, USAF
Commander

Attachment 1**SAMPLE FORMAT OF JOB SAFETY ANALYSIS (JSA)****PROCESS ID # 004****Painting Exterior Paint****PROCESS DESCRIPTION:**

Directive: TOs 1-1-691, 1-1-4, 1-1-8, 1-1-24, 1-1-690 and applicable -3, -23, or equivalent series TOs
AFSC: 2A7X3

CFETP Reference Item: A2.10.4.7.2

Location: Operations are conducted mainly in hanger 911. There have been instances where these operations have been performed in other areas such as the ISO Hanger. All these areas are open bay hangers. Before operations start, the hanger is evacuated and only authorized personnel are remaining. The doors of the hanger are closed and manned to prevent inadvertent exposures to visitors.

Procedure:

- After sanding is complete, personnel prime and paint the plane.
- Personnel of the shop “feather” all areas requiring touch-up paint once the plane has been prepared. Depending on the extent of the damage to the outside paint surface, sanding may involve going all the way down to bare metal.

There are no composites found as part of the skin of C-130 aircraft.

- Other areas are scuffed using abrasive pads.

Method:

- Mechanical Spraying using airless sprayers.
- Duration: Dependant on the amount of damage (1–3 days).
- No ventilation system used or available in the shop.
- Personnel must be signed on the task by a certified trainer within the shop prior to performing the operation.

Machine:

- Airless sprayer, explosion proof if needed, run by an MC-7 Portable Compressor.
- Duration: Dependant on the amount of damage, planes are scheduled every 30 days for Alaska planes and 35 for Yokota planes.

- Personnel must be aware of the location of the hoses at all times to prevent tangling.
- Painting is usually limited to two individuals.
- Personnel wear Tyvek suits during this operation.

Material:

- Strontium Chromate Primer

NSN 8010-01-416-6557

Deft Manufacturer

1 can per day

Stored in paint locker inside the building

- Coating Polyurethane

NSN 8010-01-265-9154

Deft Manufacturer

1 can per day (exterior paint only)

Stored in paint locker

- Residue from the paint containing:

Silica Dust (Carcinogen – Silicosis)

Chromates (Strontium Chromate) from the primer (Chromium III)

Cadmium from the paint (Carcinogen – Prostatic and Lung Cancer)

Lead potentially from lead chromate primers (Toxic to Kidney, Blood, and CNS)

Zinc from chromated primers (Toxic)

Other heavy metals (Toxic)

- HAZWASTE Profile Number POFA178A03 sampled Jul 02 (Sample # GT020458)

POTENTIAL HAZARDS:

Physical:

Ergonomics:

- Personnel have to bend down, overstretch on ladders and overextend arm in odd positions while carrying weight in their hand to perform this task.
- Personnel use hand tools that vibrate.

Heat Stress:

- Lack of air flow and PPE may increase the body core temperature.

Noise:

- Potential exposure from the sprayers and pneumatic tools.

Chemical: Inhalation, ingestion, and contact hazard.

Biological: N/A

Radiological: N/A

EVALUATION:

- Bioenvironmental Engineering Survey Date:
- Ground Safety Survey Date:
- Base Fire Department Survey Date:

CONTROLS:

- Airless Sprayers
- PPE

3M Full Face Respirators

Tyvek Suits

Gloves Nitrile