

**FISH AND WILDLIFE SERVICE
OCCUPATIONAL SAFETY AND HEALTH**

**Occupational Safety and Health
Chapter 2 Hazard Communication**

**Part 242 Industrial Hygiene
242 FW 2**

2.1 What is the purpose of this chapter? This chapter describes the U.S. Fish and Wildlife Service (Service) requirements and responsibilities for identifying, preventing, managing, and communicating about hazardous chemicals. We designed the program to ensure the safety of personnel who are or may be exposed within their work environment.

2.2 What is the Service's policy on hazard communication (HAZCOM)?

A. We have established procedures in compliance with the Occupational Safety and Health Administration (OSHA) standard ([29 CFR 1910.1200](#)) to prevent occupational illness or injury associated with uncontrolled exposures to hazardous chemicals.

B. Our Project Leaders and supervisors must communicate these procedures to employees, and employees must follow them.

2.3 What is the scope of this chapter?

A. This chapter applies to the following people who work with or near hazardous chemicals in or around their workplace:

(1) Employees,

(2) Volunteers,

(3) Contractors, concessionaires, and cooperators when they are working on a Service site that is covered by a HAZCOM plan (see section 2.9),

(4) Youth Conservation Corps members,

(5) Student interns, and

(6) Others with whom we have an employer-employee relationship (e.g., Youth Ambassador Program participants, etc.).

B. This chapter does not apply to:

(1) Those personnel who are working in an office environment where they are not likely to be exposed to hazardous chemicals, and

(2) People using common household and consumer products when they use them as intended by the manufacturer. If workers must use such a consumer product in a non-standard way that may expose them to a hazardous chemical, we must cover the product in our HAZCOM program. See [29 CFR 1910.1200\(b\)\(6\)\(ix\)](#).

2.4 What are the authorities for the HAZCOM program?

A. Occupational Safety and Health Administration (OSHA) Federal Agency Safety Programs and Responsibilities ([Public Law 91-596, Sec 19](#)).

B. Occupational Safety and Health Administration (OSHA) Standards, Hazard Communication ([29 CFR 1910.1200](#)).

C. OSHA Standards, Occupational Exposure to Hazardous Chemicals in Laboratories ([29 CFR 1910.1450](#)).

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D. Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters ([29 CFR 1960](#)).

E. Occupational Safety and Health Programs for Federal Employees ([Executive Order 12196](#)).

2.5 What terms do you need to know to understand this chapter?

A. Action Levels are the minimum levels of occupational exposure to hazards that we use as a trigger in implementing medical surveillance examinations or continued health monitoring. Action levels are chemical-specific and driven by Federal regulations.

B. Administrative Controls are procedures we can use to reduce exposure to hazardous chemicals (e.g., using a safer product, minimizing exposure duration, using the product in a way that eliminates the hazard).

C. Engineering Controls are mechanical means of reducing exposure at the source (e.g., fume hoods, exhaust fans, splash barriers, etc.).

D. Exposed means that you were subjected to the effects of a hazardous chemical when working, such as through inhalation, ingestion, a puncture wound, or skin contact.

E. GHS is an acronym for the Globally Harmonized System of Classification and Labeling of Chemicals. The GHS is a system for standardizing and harmonizing the classification and labeling of chemicals. It is a logical and comprehensive approach to: creating classification processes that use available data on chemicals for comparison with the defined hazard criteria; and communicating hazard information, as well as protective measures, on labels and Safety Data Sheets (SDS).

F. Hazard Communication (HAZCOM) is a program employers use to ensure that they identify chemical hazards, inform employees about the hazards, develop measures to protect employees from those hazards, and explain how to protect themselves before they could be potentially exposed. Another phrase we use to describe it is the “Employee Right-to-Know Program.” See [561 FW 14](#) for information on disclosing information about hazardous chemicals to State and local agencies and the Community Right-to-Know Program.

G. Hazardous Chemical(s) means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified;

(1) They include laboratory chemicals, toners, cleaning supplies, petroleum products, hazardous organic compounds, maintenance shop supplies, lubricants, fuels, welding rods, paints, adhesives, etc. Hazardous chemicals also may be raw materials (wood, metal, plastic) that cause a hazard when a worker saws, heats, drills, or processes them into finished products.

(2) Chemicals listed in the following references are hazardous:

(a) [29 CFR 1910, Subpart Z](#), Toxic and Hazardous Substances.

(b) [29 CFR 1910.1200](#), Hazard Communication, Appendix A.

(c) [Threshold Limit Values for Chemical Substances and Physical Agents, American Conference of Governmental Industrial Hygienists](#), Latest Edition.

(d) [Annual Report on Carcinogens, National Toxicology Program](#), Latest Edition.

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(e) [Monographs, International Agency for Research on Cancer](#), Latest Edition.

H. Personal Protective Equipment (PPE) are items such as gloves, safety glasses, goggles, protective footwear, respirators, etc., that we require employees to wear to protect them from hazards associated with their assigned job tasks.

I. Physical Hazard(s) means 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 when in contact with water emits flammable gas. See Appendix B to § 1910.1200—Physical Hazard Criteria.

Table 2-1: Examples of Physical Hazards	
Combustible liquids	Heat and cold stress
Compressed gases	Ionizing radiation
Explosives	Laser radiation
Flammable materials	Continuous, intermittent, and impulse noise
Organic peroxide	Radio frequency/microwave radiation
Oxidizers	Ultraviolet radiation
Corrosives	Ultrasonic acoustic radiation
Pyrophorics (spontaneously ignite)	Hand/arm vibration
Unstable materials	Static magnetic fields
Water-reactive materials	Infrared radiation
Extremely low frequency radiation	Unexploded ordnance or munitions

J. Pictogram is a composition that includes a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

K. Safety Data Sheet (SDS) and Material Safety Data Sheet (MSDS) (we refer to them collectively in this chapter as “SDSs”) provide invaluable information about health risks, safety precautions, personal protective measures, first aid procedures, and other information on various chemical products.

L. Signal word is a word used to indicate the relative level of severity of a hazard and alert the reader to a potential hazard. The signal words used on labels are either “danger” or “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe.

2.6 Who is responsible for the hazard communication program? Table 2-2 describes the responsibilities for this program.

Table 2-2: Responsibilities for Hazard Communication	
These employees...	Are responsible for...
A. The Director	<p>(1) Ensuring the Service maintains an effective and comprehensive occupational safety and health program, and</p> <p>(2) Approving the policy for our HAZCOM program.</p>
B. The Assistant Director – Business Management and Operations	<p>Ensuring that:</p> <p>(1) A HAZCOM program policy is in place, and</p> <p>(2) Providing sufficient support and resources to the Chief, Division of Safety and Health, to ensure that the Chief can accomplish program goals.</p>

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Table 2-2: Responsibilities for Hazard Communication	
These employees...	Are responsible for...
C. Directorate Members	Ensuring that there are sufficient resources and support in place to implement an effective and comprehensive HAZCOM program within their areas of responsibility.
D. The Chief, Division of Safety and Health	<ul style="list-style-type: none"> (1) Revising and updating this chapter, (2) Interpreting the requirements of this chapter, and (3) Working to resolve Servicewide issues and questions about the HAZCOM program.
E. Regional/HQ Safety Managers/Regional Environmental Compliance Coordinators	<ul style="list-style-type: none"> (1) Advising managers and Collateral Duty Safety Officers about the HAZCOM program in their Regions, (2) Interpreting program requirements and working to resolve Regionwide issues and questions, (3) Providing technical assistance and guidance to field stations to help them comply with this chapter (including reviewing SDSs and making requests for safer products), and (4) Evaluating compliance of a station's HAZCOM program with this policy.
F. Project Leaders/Supervisors	<ul style="list-style-type: none"> (1) Whenever possible, limiting the use of hazardous chemicals, (2) Developing and updating (as necessary) a written HAZCOM plan for all operations in work areas that require it (see section 2.7A for more information), (3) Ensuring that Safety Data Sheets (SDS) are in place and current, (4) Evaluating their field stations' compliance with the HAZCOM program, (5) Using product substitutions, engineering controls, administrative controls, and/or personal protective equipment, as needed, to protect employees from potential illness and injury, (6) Ensuring that employees have received training and have a thorough understanding of their HAZCOM program (see section 2.7B), (7) Ensuring that all new (not previously used) chemicals brought into the workplace are evaluated for hazardous properties and are not used until an SDS/MSDS is received from the manufacturer or distributor, (8) Maintaining written records for the HAZCOM program elements, (9) Providing access to medical service providers for those

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Table 2-2: Responsibilities for Hazard Communication	
These employees...	Are responsible for...
	<p>employees who get sick or experience ill effects from working with or being exposed to workplace hazards at or above action levels. We provide these medical services at no cost to the employee, and</p> <p>(10) Researching and providing the least toxic substance that will effectively and efficiently perform a given task. See 301 FW 7, Green Procurement.</p>
G. Employees	<p>(1) Complying with all aspects of the HAZCOM program applicable to their duties,</p> <p>(2) Successfully completing required HAZCOM program training so that they:</p> <ul style="list-style-type: none"> (a) Understand how to interpret and properly label chemicals, (b) Know the location of and how to read SDSs, and (c) Know how to apply engineering and administrative controls to minimize or eliminate hazards. <p>(3) Wearing and maintaining personal protective equipment needed for hazardous chemical-related activities and following the manufacturers' instructions,</p> <p>(4) Notifying their Project Leaders/supervisors if they are experiencing any adverse health effects, and</p> <p>(5) Maintaining proper hygiene and not eating, smoking, or drinking in or near the work areas where hazardous chemicals are used.</p>

2.7 What are the required elements of a Hazard Communication Program (HAZCOM)? This section describes the six primary elements of our HAZCOM program: HAZCOM plans, training, SDSs, hazard chemical inventories, labeling, and employee medical records of exposure.

A. HAZCOM Plan:

(1) The HAZCOM plan is a document:

- (a)** Describing how Project Leaders/supervisors identify and communicate the risks and exposure potentials to employees from hazardous chemicals in their workplace;
- (b)** Addressing the elements of the program for their station—training, SDSs, hazard chemical inventories, labeling, storage and shelf-life, exposure records, and non-routine hazardous situations; and
- (c)** Describing waste generated from chemical use and how it will be disposed (see the requirements in [561 FW 6](#), Resource Conservation and Recovery Act (RCRA) Hazardous Waste).

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(2) [Exhibit 1](#) is a sample HAZCOM plan that is an easy-to-use, standardized format for developing site-specific or facility-specific plans. Project Leaders/supervisors/facility managers may check with their Regional Safety Office for Region specific samples.

(3) Complexes may have one plan that covers various locations, but the plan must specifically meet the needs of each location and must adequately address the components of each location (e.g., the locations of SDSs, hazardous chemical storage, explosives, etc.).

B. Training:

(1) All employees who are or may be exposed to chemicals must receive general hazard communication training before they are assigned to duties where hazards are present or whenever a hazard changes. This training need can be achieved through the [DOI Learn](#) course titled “Safety: USGS Hazard Communication Program – GHS”.

(2) Site specific training is also required and may be in the form of informal group or individual briefings, prepared training, or pamphlets and printed information. The Project Leader/supervisor or Collateral Duty Safety Officer may establish the best method to train employees.

(3) Information about specific chemical hazards, physical properties (i.e., flash points, vapor pressure, and reactivity) and protective measures are on the written labels and SDSs of chemicals and products.

(4) The most important aspects of training under this program are to ensure that employees are aware of their potential exposure to hazardous chemicals, know and understand how to read and use labels including the pictograms and precautionary measures and SDSs, and are aware of and follow appropriate protective measures. Table 2-3 lists the minimum training items to cover.

Table 2-3: Training Items	
<ul style="list-style-type: none">• Location of SDSs and how to read and interpret them.• Meanings and terms found on the SDSs (you can find SDS terminology and definitions online).• The use, risks, precautions, etc. of hazards in the workplace.• The specific chemical hazards and physical properties of the products used (i.e., flash point, vapor pressure, reactivity).• Signs and symptoms of exposure.• Regulated exposure levels (i.e., permissible exposure limits, action levels).	<ul style="list-style-type: none">• Station-specific storage protocols for flammable liquids, pesticides, acids, and chemicals and chemical compatibility.• Personal protective equipment and work procedures.• Labeling system.<ul style="list-style-type: none">• Pictograms• Hazard Statements• Signal Words• Precautionary Statements• Emergency and first aid procedures.• A summary review of 29 CFR 1910.1200 (OSHA’s HAZCOM standard) and this chapter.

(5) If an alternate non-DOI Learn Hazard Communication course is used, then project leaders/supervisors must enter course information showing when employees, volunteers, and youth/collegiate program participants complete HAZCOM into the Department’s Learning Management System (i.e., [DOI Learn](#)). If the system will not allow them to enter the training, the Project Leader/supervisor must maintain and track safety and health training by documentable and producible means.

C. Safety Data Sheets (SDS): The SDS provides detailed information on each hazardous chemical, including its potentially hazardous characteristics and recommendations for appropriate protective measures. See OSHA Quick Card ([OSHA Form 3493](#)) for further guidance. Currently existing MSDS formats remain acceptable until June 1, 2015, when the new format outlined in OSHA Form 3493 must be in place.

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(1) Field stations must obtain an SDS for every hazardous chemical they store or use. Though not required for common household and consumer products, Service policy is that the field stations will keep SDSs for such products. As the new SDS comes in with product purchases, replace the existing MSDS with the new SDS.

(2) When employees order new chemicals, the purchase and delivery orders and Orders for Supplies and Services ([OF 347](#)) must include the following or a similar statement:

“The distributor must provide a Safety Data Sheet, covering what’s listed in Quick Card OSHA Form 3493, or one essentially similar or pertinent to the product with the shipment or under a separate cover. The SDS is a mandatory part of this order. If the distributor does not provide the SDS, the Service will not accept the order.”

(3) Project Leaders/supervisors must ensure that SDSs for all chemicals are kept in a central location that is readily accessible by employees. Additional SDS binders may be kept at specific locations where those products are being used (lab, shop, etc.).The location(s) must be clearly identified in the station’s HAZCOM plan.

(4) SDSs of hazardous chemicals that employees no longer use or store at a facility may be removed from the station's HAZCOM plan and chemical inventory. However, Project Leaders/supervisors/facility managers must ensure they are kept in an archived HAZCOM MSDS/SDS file or binder and maintained in accordance with [section 2.7G](#).

(5) Field stations must provide copies of SDSs for chemicals they store in quantities over the reporting threshold to local fire authorities. See [561 FW 14](#) and [40 CFR 355 appendix A and B](#)

D. Hazardous Chemical Inventories. Project Leaders/supervisors/facility managers must keep a list of hazardous chemicals for their facilities and update it at least annually and as new products containing hazardous chemicals are received. They may use [FWS Form 3-2288](#) for the inventory or a similar inventory system. Each item on the inventory must have a corresponding SDS and product identifier. We encourage field stations to share the station’s chemical inventory and SDSs with local fire departments to help communicate hazards they may encounter during a fire response.

E. Labeling. All containers of hazardous chemicals must be labeled, tagged, or marked with the identity of the chemical and appropriate hazard warnings. Chemical manufacturers and distributors must appropriately label every container of hazardous chemical that they ship. There are new labeling requirements under the United Nations Globally Harmonized System of Classification and Labeling of Chemicals and they are as follows:

- Pictogram and the associated hazards (see exhibit 2),
- Signal word,
- Precautionary statements,
- Product identifier, and
- Supplier identification.

See [OSHA form 3636](#) for more in-depth description.

(1) If an employee transfers a hazardous chemical into another container, he/she must ensure that the secondary container is suitable for the substance (unless he/she plans to use it immediately) and then label it. See exception below in E(2). The transfer container must be free of residues and contamination from previously stored chemicals.

(2) Employees do not have to label transfer containers if they plan to use the chemical immediately, and they are using it themselves (not giving it to someone else to use).

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F. Storage. All chemicals must be stored in locations free of hazards and well ventilated in accordance with [29 CFR 1910.106](#). Chemicals must be stored only with those that have similar properties (compatible). See exhibit 3.

G. Employee Medical Records of Exposures. When an employee is exposed or potentially exposed to hazardous chemicals, we keep records on exposure sampling data, the SDSs, employee medical examination results, hazardous chemical inventories, and hazardous chemical use in accordance with [29 CFR 1910.1020](#), [5 CFR 293.511](#), and 242 FW 4, Medical Programs. We must keep these records for the period of an employee's employment plus 30 years, and then transfer them to the National Archives and Records Administration. See [242 FW 4](#), Medical Programs, for more information on medical records maintenance.

2.8 How does the Service handle non-routine hazards?

A. For an activity that is not part of the routine operations and where there is a potential hazard, the Project Leader/supervisor must:

- (1) Prepare a job hazard assessment (JHA) describing the chemical handling procedures (also see [240 FW 1](#)), and
- (2) Review the JHA with affected employees before they start the activity.

B. Employees must handle emergency situations such as fires, spills, or leaks according to their duty station's procedures and the procedures listed on the SDS. Only employees who have had training in the required procedures and personal protective equipment may respond to a chemical emergency (see 242 FW 6 Hazardous Waste and Emergency Response, section 6.8). If adequate personnel and equipment are not available to respond to a chemical emergency, employees must evacuate - not attempt to respond - and notify local emergency responders.

2.9 How does the Service interact with contractors/concessionaires/cooperators at sites covered by a HAZCOM plan? Contractors, concessionaires, and cooperators working at sites covered by a HAZCOM plan must comply with the parts of the plan that are applicable to their work. Table 2-4 describes what information the Project Leader/supervisor/facility manager must give contractors and what we must expect them to give to us.

Table 2-4: Information the Project Leader/Supervisor Must Give Contractors, Concessionaires, and Cooperators	
<ul style="list-style-type: none">• Location of SDSs/MSDSs for Service-owned chemicals.• Precautions we will take to protect contractors, concessionaires, and cooperators.• Potential exposure to hazardous chemicals.• Chemicals used in or stored in areas where contractors, concessionaires, and cooperators will be working.• Health hazard information (i.e., signs and symptoms of exposure).• Station-specific storage protocols for flammable liquids, pesticides, and acids and chemical compatibility.	<ul style="list-style-type: none">• Labeling system for chemicals in use.• Safe handling procedures for any Service-owned chemicals that contractors may have to handle.• Clear instructions to not abandon chemicals, containers, or other materials that are or could become hazardous waste.• Emergency procedures.• Asbestos-containing building materials and lead paint that contractors may be in contact with as a condition of their contract.

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Information Contractors, Concessionaires, and Cooperators Must Give to Us

- List of chemicals that contractors are bringing on Government property and copies of SDSs/MSDSs for every chemical.
- Location where contractors, concessionaires, and operators are storing chemicals on the site.
- Precautionary measures that contractors, concessionaires, and cooperators will take to protect personnel when working around the chemicals.

2.10 What are the recordkeeping requirements associated with the HAZCOM program?

A. Project Leaders/supervisors must retain:

- (1) Copies of SDSs (chemicals being used and no longer in use) (see [section 2.7C](#)),
- (2) Exposure sampling results for a minimum of 30 years, and
- (3) A written record of all hazard communication training employees receive (see [section 2.7B](#)),

B. The servicing Human Resource office must retain in the employee's medical file, all medical evaluations such as physician opinions, physical exam results, and physical exam supporting documentation for the length of employment plus 30 years.

2.11 Where can someone find more complete details about HAZCOM program requirements? For complete details of HAZCOM program requirements, visit [OSHA's Web site](#). If you cannot access this site, contact your Regional/HQ Safety Office for assistance.

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DEPUTY DIRECTOR

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