



NATIONAL PARK SERVICE

Environmental Audit Program

EnviroCheck Sheet

*Hazard Communication
June 2002 Update*

HAZARD COMMUNICATION (HAZCOM)

The U.S. Occupational Safety and Health Administration (OSHA) Hazard Communication (HAZCOM) Standard (29 CFR 1910.1200) ensures that employers and employees are aware of **physical hazards** and **health hazards** of chemicals. It also communicates how employers and employees should protect themselves from these hazards in the workplace. Since many parks use potentially hazardous chemicals (such as paints, solvents and automotive products), the HAZCOM regulations are likely to be applicable to their operations.

Auditor's Guidelines:

Records to Review

- Written Hazard Communication Program
- Material Safety Data Sheets
- List of hazardous chemicals present

Features to Observe

- Labels on containers
- MSDS binders
- Hazardous material storage cabinets
- Sample of hazardous chemicals and MSDSs
- Wastewater treatment plants
- Maintenance areas

Persons to Contact

- Maintenance supervisor
- Head Ranger
- Purchasing officer
- Interpretation staff
- Laboratory staff
- Volunteer coordinator
- Concession specialist
- Custodial staff
- Preservation staff
- Natural Resources staff

DEFINITIONS

Hazardous Chemical: Any chemical that is a **physical** or a **health hazard**.

Health Hazard: A chemical which has been found to cause acute or chronic health effects in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

Physical Hazard: A chemical that is a combustible liquid, compressed gas, explosive, flammable, an organic peroxide, an oxidizer which may cause fire through the release of oxygen or other gases, a chemical which will ignite at air temperature of 130° F, is unstable (reactive), or water-reactive.

Readily Accessible: Term used in the OSHA regulations regarding availability of Material Safety Data Sheets (MSDSs) for facility employees. According to regulatory interpretation, readily accessible means there are no barriers to accessing the information. OSHA has interpreted the MSDS availability requirement to allow the use of computers, telefax, microfiche or any other means, as long as a readable copy of the MSDS is available to the downstream workers while they are in their work areas, during each work shift. The key to compliance with this provision is assuring no impediments to employee access to the information. (The interpretation of "readily accessible" is discussed in more detail under the "Material Safety Data Sheet" section on page 5, below.)

This document does not necessarily contain all information needed to determine compliance status.

LEGAL REQUIREMENTS

OSHA Hazard Communication Standard

The Occupational Safety and Health Act of 1970 established the Occupational Safety and Health Administration (OSHA) within the US Department of Labor. The original Act included language to the effect that employees should be apprised of all hazards to which they are exposed on the job. In the early 80's, OSHA implemented this instruction by enacting the Hazard Communication Standard (HCS) as 29 CFR 1910.1200. The HCS became effective in 1986. A fundamental premise of the HCS is that employees who may be exposed to hazardous chemicals in the workplace have a right to know about the hazards and how to protect themselves. For this reason, the HCS is sometimes referred to as the Worker Right-to-Know Legislation, or more often just as the Right-to-Know law. Although the original HCS applied only to the manufacturing industry, subsequent court challenges have modified the scope of the law so that today the HCS applies to nearly all sectors of the work force.

The HCS sets forth guidelines and requirements in the following areas:

- *Hazard Determination, 29 CFR 1910.1200 (d)* - Requires employers to identify and maintain a list of all hazardous chemicals used in the workplace.
- *Written Implementation Program, 29 CFR 1910.1200 (e)* - Requires employers to develop a written plan, the Hazard Communication Program, detailing how the requirements of the HCS are implemented by the employer.
- *Chemical Labeling, 29 CFR 1910.1200 (f)* - Requires that all chemicals in the workplace be labeled. Information present must include the name of the chemical and warnings about any hazards the material may present. This requirement may be implemented in a variety of ways. Two examples are the NFPA Hazard Identification System and the Hazardous Materials Identification Guide
- *Material Safety Data Sheets, 29 CFR 1910.1200 (g)* - MSDSs must be readily available to employees at locations where hazardous materials are used. An MSDS is a document that gives detailed information about a material, including any hazards associated with the material.
- *Employee Training, 29 CFR 1910.1200 (h)* - Requires employers to provide employee training regarding the proper handling of hazardous materials, use and interpretation of both MSDSs and HAZCOM labels, and information about the HCS.

NPS Policy

NPS Director's Order and Reference Manual #50B – Occupational Safety and Health Program

DO and RM #50B became effective December 22, 1999. Roles and responsibilities with regard to OSHA regulatory compliance are addressed in these documents.

State and Local

OSHA encourages states to develop and enforce job safety and health plans. All OSHA-approved state programs must comply with Federal regulations and may include additional requirements. It is important to check with state OSHA offices and local authorities to have a full understanding of compliance requirements for the 26 OSHA-approved states and territories. These states and territories include AK, AZ, CA, CT, HI, IN, IA, KY, MD, MI, MN, NJ, NV, NM, NY, NC, OR, PR, SC, TN, UT, VT, VI, VA, WA, WY.

COMPLIANCE REQUIREMENTS

In general, the HAZCOM Standard applies to all National Park Service (NPS) facilities using “hazardous chemicals.” This means that all employers working with hazardous chemicals on NPS lands must have a written, implemented HAZCOM program. However, if the only hazardous chemicals used onsite are among those listed below, then the HAZCOM Standard **is not** applicable:

- Consumer products (as defined by the Consumer Product Safety Act) and hazardous substances (as defined by the Federal Hazardous Substances Act) that are used in the same manner as a **normal, household consumer** (NOTE: use for park facility cleaning or maintenance would not be considered normal, household use). In these cases, employees must not be exposed to the consumer products or hazardous substances for a longer amount of time or more frequently than a normal consumer.
- Hazardous waste (as defined by the Resource Conservation and Recovery Act (RCRA)).
- Tobacco or tobacco products.
- Wood or wood products - including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility (wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut, generating dust, are not exempted);
- Articles (which are manufactured items that do not release or expose users to hazardous chemicals under normal usage).
- Food, drugs, cosmetics, or alcoholic beverages that are for sale in a retail establishment.
- Food, drugs, or cosmetics intended for personal use by employees in the workplace.
- Drugs (as defined by the Federal Food, Drug, and Cosmetic Act) in tablets or pills.

The HAZCOM Standard is superseded by the US OSHA Lab Standard (29 CFR 1910.1450) in many laboratories. **Refer to the Laboratory Chemical and Waste Management EnviroCheck Sheet for more information regarding comparable requirements in laboratories.**

Written Hazard Communication Program

A safety specialist, or designated program administrator, should be identified and responsible for all aspects of the written HAZCOM program. The written HAZCOM program should include the following elements:

- A list of all hazardous chemicals used at the facility. The chemicals should correspond with the appropriate MSDSs. The list of hazardous chemicals can be compiled for the entire workplace, or by work area; and
- Methods used to inform employees of the hazards of non-routine tasks, and hazards associated with chemicals in unlabeled pipes in their work areas.

If hazardous chemicals are used or stored such that employees of *other* employer(s) working onsite at the park may be exposed to these chemicals, then these additional elements must be included in the park’s written HAZCOM program detailing how the employer will:

- Make MSDSs readily accessible to the other employer(s)’ employees for each hazardous chemical to which employees may be exposed.
- Inform the other employer(s) of precautionary measures taken to protect employees during normal operating conditions and in foreseeable emergencies.
- Inform the other employer(s) of the hazardous chemical labeling system used.

If the only hazardous chemicals present onsite are in sealed containers that are not opened while onsite (e.g., in a retail situation where cleaners are sold to consumers), then sections of the written HAZCOM program regarding labels, MSDSs, and training only need to include the following:

- Ensuring that labels are not removed or defaced;
- Keeping MSDSs if they are received from incoming shipments;
- Obtaining MSDSs if employees ask for them; and
- Training employees on the written HAZCOM program, although they do not need to know the location and availability of the written HAZCOM program.

Labels and Other Forms of Warning

Chemical manufacturers must ensure that their hazardous chemicals are labeled, tagged, or marked with the following information:

- Hazardous chemical identity;
- Appropriate hazard warnings; and
- Name and address of chemical manufacturer, importer, or other responsible party.

Each container of hazardous chemicals should be prominently labeled, tagged, or marked in English with the following information):

- Hazardous chemical identity; and
- Appropriate hazard warning.

This information may also be conveyed using signs, placards, process sheets, batch tickets, operating procedures, or other written materials. Information in other languages may be added as well, as long as the information is also always presented in English. (This is a good idea in settings where employees are not fluent in English.)

It is not necessary to label portable containers of hazardous chemicals as long as they are used immediately, and only by the employee who transferred the hazardous chemicals. (NOTE: If it cannot be readily determined that an unlabelled substance, in a portable, container fits this criteria, such a situation will be a finding of non-compliance with labeling requirements.)

Employers do not need to label the following hazardous chemicals:

- Pesticides covered by labeling requirements under the Federal Insecticide, Fungicide, and Rodenticide Act;
- Food, food additives, color additives, drugs, cosmetics, or medical or veterinary devices, as defined by the Federal Food, Drug, and Cosmetic Act, and covered by labeling requirements by the Food and Drug Administration;
- Distilled spirits, wine, or malt beverages intended for nonindustrial use covered by labeling requirements under the Federal Alcohol Administration Act; and
- Consumer products (as defined by the Consumer Product Safety Act) or hazardous substances (as defined by the Federal Hazardous Substances Act), when subject to a consumer product safety standard or labeling requirement by those Acts.

Material Safety Data Sheets

MSDSs are technical documents that provide a detailed description of a hazardous chemical. Distributors and/or chemical manufacturers must send them along with initial shipments of hazardous chemicals. MSDSs must be in English and require the following information:

- Chemical and common name;
- List of ingredients that contribute to known hazards and the common name of a mixture;
- Physical and chemical characteristics of the hazardous chemical;
- Physical hazards and health hazards including signs and symptoms of exposure and aggravated medical conditions in connection with the chemical;
- Physical hazards of the hazardous chemical, (flammable, explosive, and reactive);
- Primary route of entry (inhalation, injection, absorption, or ingestion);
- OSHA permissible exposure limit (PEL);
- Potential as a carcinogen;
- Safe handling and procedures for clean up of spills and leaks;
- Personal protective equipment (PPE) needed for handling the hazardous chemical;
- Emergency and first aid procedures;
- Date of preparation; and
- Name, address, and telephone number of chemical manufacturer or other responsible party.

1910.1200(g)(8) of the HAZCOM Standard states that employers are required to maintain in the workplace copies of the required MSDSs for each hazardous chemical. The employer is also required to ensure that the MSDSs are “readily accessible” during each work shift to employees when they are in their work area(s).

Interpreting “Readily Accessible”

The purpose of requiring MSDSs under the HAZCOM Standard is to provide detailed information on each hazardous chemical, including potential hazardous effects, physical and chemical characteristics of a material, and recommendations for appropriate protective measures. Employers must have an MSDS for each hazardous chemical that they use in the workplace.

The HAZCOM Standard states: “Electronic access, microfiche, and other alternatives to maintaining paper copies of the material safety data sheet are permitted as long as no barriers to immediate employee access in each workplace are created by such options.” This requirement may be accomplished in many different ways; the employer must decide what is appropriate for the particular workplace. The key to compliance with the rule is that employees get the information when they need it. Actual paper copies of data sheets, computer terminal access, FAX, or other means of providing readable copy on-site are permitted, again, **as long as no barriers to employee access exist.**

In the case of electronic transmission, employers are required to have a back up for likely system malfunctions or during periods of shutdown for temporary servicing. As a back up system, employers can either maintain a hardcopy or utilize some other means that ensures an employee’s access to MSDS. Obviously, the other means of compliance would depend on the method of MSDS transmission. For example, if a FAX system is used, the employer should make arrangements for the use of another FAX machine should the designated machine malfunction. If reliable FAX transmission of MSDS cannot be assured, hardcopies should be maintained.

Based on the specific workplace, and the means the park has chosen to make MSDS available, it may be up to the auditor to determine if any barriers to employee access to MSDSs exist.

Employee Information and Training

Employers must provide employees with *information* and *training* on hazardous chemicals when they are first hired, and whenever a new hazard is introduced into their work area. Employees must know about the requirements of the HAZCOM Standard, where hazardous chemicals are present in their work area, and the location and availability of the written HAZCOM program (including the list of hazardous chemicals and associated MSDS).

While OSHA does not require that employers keep employee-training records, the NPS must be able to demonstrate that employees have been trained. Consequently, to demonstrate compliance, the NPS requires training records to be maintained. Employees must be trained, at a minimum, on the following:

- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the workplace such as visual appearance or smell;
- Physical and health hazards of chemicals in the workplace;
- Procedures to protect personnel from hazards; and
- Details of the written HAZCOM program including the employer labeling system, an explanation of MSDS, and how employees can obtain and use appropriate hazard information.

FOR MORE INFORMATION

- NPS/Hazardous Waste Management. (202) 565-1245. OSHA Lab Standard Interpretation and Compliance Letters <http://www.osha-slc.gov/OshDoc/Interp_data/I19910208.html>.
- NPS/EnviroFact Sheet “Chemical Hygiene Plans.” NPS park reference.
- NPS/Hazardous Waste Management, 202-565-1245.
- OSHA Hotline: Referral service for OSHA programs. 1-800-321-6742.
- OSHA Pamphlet: “Chemical Hazard Communication” Publication No. 3084, 202-219-4667.
- OSHA Pamphlet: “Training Requirements in OSHA Standards and Training Guidelines” Publication No. 2254. Available from GPO for a fee beginning 9/98. 202-512-1800.
- OSHA Pamphlet: “Safety and Health Program Management Guidelines” (Federal Register 54 (18): 3908-3916, January 26, 1989).
- OSHA Form 174: Nonmandatory MSDS format developed by OSHA.
- OSHA Internet Site: Information on OSHA organization and programs. <<http://www.osha-slc.gov/SLTC/>>
- OSHA Training Institute. 708-297-4810.
- OSHA’s Small Business Outreach Training Program: Hazard Communication, <<http://www.osha-slc.gov/SLTC/smallbusiness/sec16.html>>.



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CHECKLIST ITEM	PRIORITY	NOTES
<i>Written Hazard Communication (HAZCOM) Program</i>		
1. A written HAZCOM program is developed, implemented, and maintained at each workplace, which describes how the park meets the regulatory requirements regarding: <ul style="list-style-type: none"> • Labels and other forms of warning; • Material Safety Data Sheets (MSDSs); and • Employee information and training. [29 CFR 1910.1200(e)(1)]	1	
2. The park's HAZCOM program includes a list of the hazardous chemicals known to be present (the list may be compiled for the park as a whole or for individual work areas). [29 CFR 1910.1200(e)(1)(i)]	2	
3. The park's HAZCOM program includes methods that will be used to inform employees of the hazards of non-routine tasks (e.g. working in a confined space). [29 CFR 1910.1200(e)(1)(ii)]	2	
4. If the park produces, uses, or stores hazardous chemicals such that others (e.g., contractors, concessioners, volunteers) are potentially exposed to these hazardous chemicals, the hazard communication program covers: <ul style="list-style-type: none"> • How MSDS will be provided to others; • How precautionary measures are taken to protect others; and • How the labeling system is communicated to park staff. [29 CFR 1910.1200(e)(2)]	2	
5. A safety specialist, or other designated individual, is responsible for the written HAZCOM program. [BMP]	3	
6. The HAZCOM program is available, upon request, to all employees on all work shifts. [29 CFR 1910.1200(e)(4)]	2	
<i>Labeling and MSDSs</i>		
7. Containers with hazardous chemicals are labeled or identified using other written materials (e.g., signs, placards) with the following information: <ul style="list-style-type: none"> • Identity of hazardous chemicals; and • Appropriate hazard warnings associated with the chemical. [29 CFR 1910.1200(f)(5) and (6)]	2	
8. Unlabelled containers are intended for immediate use by the employee performing the transfer. [29 CFR 1910.1200(f)(7)] NOTE: It will be up to the auditor to determine if the employee is using any unlabelled containers <i>immediately</i> .	2	
9. Containers with hazardous materials are prominently labeled or identified using other written materials (e.g., signs, placards) in English. [29 CFR 1910.1200(f)(9)]	2	
10. An MSDS is maintained for each hazardous chemical used at the park. [29 CFR 1910.1200(g)(1)] Note: If hazardous chemicals are handled only in sealed containers (such as a retail situation), an MSDS is not required unless requested by an employee, or if it accompanies an incoming shipment.	2	

This document does not necessarily contain all information needed to determine compliance status.

<p>11. MSDS for each hazardous chemical used in the work area are readily accessible to employees on all work shifts. (As long as employees can get the information when they need it, any approach to making them “readily accessible” may be used.) [29 CFR 1910.1200(g)(8)]</p> <p>Note: Whether or not MSDS are “readily accessible” may involve auditor interpretation based on the workplace environment and the method used to provide MSDS. Also, if employees travel between workplaces, the MSDS may be kept at the <i>primary</i> workplace facility, provided that access is available to all employees on all shifts. [29 CFR 1910.1200(g)(9)]</p>	2	
<p>Employee Training and Awareness</p> <p><i>Note: All findings for Questions 12-20 are Priority 1 if employees are not familiar with hazards, how to read MSDSs, or the labeling system. Completing this section requires staff interviews and document reviews.</i></p>		
<p>12. The park staff is provided with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and MSDS. [29 CFR 1910.1200 (h)(1)]</p>	2	
<p>13. Park staff are informed of the requirements of Hazard Communications regulations applicable to their operations. [29 CFR 1910.1200 (h)(2)(i)]</p>	2	
<p>14. Park staff are informed of any operations in their work area where hazardous chemicals are present. [29 CFR 1910.1200(h)(2)(ii)]</p>	1	
<p>15. Park staff are informed of the location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and MSDS required by the Hazard Communications regulations. [29 CFR 1910.1200(h)(2)(iii)]</p>	2	
<p>16. Employee training at the park includes methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring, visual appearance or odor of hazardous chemicals when being released, etc.). [29 CFR 1910.1200 (h)(3)(i)]</p>	1	
<p>17. Employee training at the park includes information regarding the physical and health hazards of the chemicals in the work area. [29 CFR 1910.1200 (h)(3)(ii)]</p>	1	
<p>18. Employee training at the park includes information regarding the measures park staff can take to protect themselves from hazards, including specific procedures implemented at the park to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used. [29 CFR 1910.1200 (h)(3)(iii)]</p>	1	
<p>19. Employee training at the park educates park staff regarding the details of the hazard communication program developed at the park, including an explanation of the labeling system and the material safety data sheet, and how they can obtain and use the appropriate hazard information. [29 CFR 1910.1200(h)(3)(iv)]</p>	2	
<p>20. Training and information provided to employees, necessary to comply with questions 11-19, is documented; documentation is maintained onsite. [RM 50 B 9.2.B]</p>	2	