

Lake County Department of Utilities

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TITLE: Hazard Communications Program

PURPOSE:

The purpose of the Lake County Department of Utilities Hazard Communication Program is to raise employee awareness and knowledge of chemical hazards by use of proper container labeling, Material Safety Data Sheet (MSDS) management, and by providing our employees and on-site contractors with training and information availability.

SCOPE:

This program applies to all work operations in our organization where employees may be exposed to hazardous substances under normal working conditions or during emergency situations.

This program does not apply to any food, food additive, drug, beverage, cosmetic, tobacco or tobacco products, and wood or wood products.

The organization is committed to the success of our written programs and strives for clear understanding, safe behavior, and involvement from every level of the organization. If after reading this program, you find that improvements can be made, please contact the Department Safety Manager.

RESPONSIBILITIES:

Department Employees

Department employees must attend Hazard Communication training and pass a competency exam.

Lake County Department of Utilities

Employees are also responsible for reviewing MSDSs for chemicals that they interact with to ensure proper protective measures are taken when handling, transferring or working with each chemical.

Employees must also obtain MSDSs and complete a Chemical Request Form (see Appendix A) prior to ordering or bringing a new chemical into a Department workplace.

It is the responsibility of all employees to properly label all secondary containers, to properly store chemicals when not in use, and to properly dispose of chemical containers when the product has expired or been completely used.

Department Directors, Superintendents, Supervisors and Managers

All Department Directors, Superintendents, Supervisors and Managers are responsible for enforcing all elements of the Hazard Communication Program.

Department Directors, Superintendents, Supervisors and Managers must also ensure that all employees are provided with training and effective information on hazardous chemicals in their work area upon initial assignment, and whenever a new physical or health hazard that employees have not previously been trained about is introduced in the workplace.

Department Directors, Superintendents, Supervisors and Managers must also ensure that MSDSs for their respective facilities are readily accessible to all employees on all shifts.

Department Directors, Superintendents, Supervisors and Managers are responsible for informing and coordinating the training of the Department's Hazard Communication Program for all contractors brought on site that may be exposed or potentially exposed to Department hazardous chemicals.

Department Safety Manager

The Department Safety Manager is responsible for coordination of the Hazard Communication Program including, reviewing, updating, and maintaining the written program; coordinating the audit, review, and update of the Department's Master Chemical Inventory; reviewing and approving or denying all new chemicals requested to be brought into the workplace.

The Department Safety Manager is also responsible for maintaining Hazard Communication training records for employees.

The Department Safety Manager is also responsible for maintaining the retired chemical inventory.

Lake County Department of Utilities

Contractors

Contractors hired by the Department are responsible for obtaining and providing all MSDSs for hazardous chemicals that will be brought into the workplace for use and/or storage.

Contractors are also responsible for adhering to all elements of the Hazard Communication Program.

DEFINITIONS:

1. *Chemical* – Any element, chemical compound or mixture of elements and/or compounds.
2. *Chemical Common Name* – Any designation or identification such as trade name, brand name or generic name used to identify a chemical.
3. *Combustible Liquid* – Any liquid having a flashpoint at or above 100 °F but below 200 °F.
4. *Compressed Gas* – A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 °F; or a gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 °F regardless of the pressure at 70 °F; or a liquid having a vapor pressure exceeding 40 psi at 100 °F.
5. *Container* – Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a chemical.
6. *Employee* – A worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers who encounter hazardous chemicals in non-routine, isolated instances are not covered.
7. *Explosive* – a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.
8. *Flammable* – A chemical that is either: an aerosol; a gas that at ambient temperature and pressure forms a flammable mixture; a liquid with a flashpoint below 100 °F; or a solid, other than a blasting agent or explosive, that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or which can readily ignite.
9. *Foreseeable Emergency* – Any potential occurrence such as equipment failure, container rupture, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.
10. *Hazardous Chemical* – Any chemical which is a physical hazard or a health hazard.
11. *Health Hazard* – A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur 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, and agents which damage the lungs, skin, eyes or mucous membranes.

Lake County Department of Utilities

12. Identity – Any chemical or common name which is identified on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be made among the Department's list of chemicals, the label and the MSDS.
13. Immediate Use – The chemical will be under the control of and used by the person who transfers it from a labeled container and only within the work shift in which it is transferred.
14. Label – Any written, printed or graphical material displayed on or affixed to containers of chemicals.
15. Master MSDS Binder – A 3-hole binder or binders that contain all of the chemicals used and stored at each respective workplace. These binders are typically stored on the Central Safety Communication Center.
16. Material Safety Data Sheet (MSDS) – A written or printed material concerning a hazardous chemical which is prepared in accordance with CFR 1910.1200(g). A material safety data sheet is required for a hazardous chemical which is used in the workplace. MSDSs must be maintained and readily accessible during each work shift to all employees.
17. Organic Peroxide – An organic compound which may be considered a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.
18. Oxidizer – A chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.
19. Physical Hazard – A chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable or water-reactive.
20. Pyrophoric – A chemical that will ignite spontaneously in air at a temperature of 130 °F or below.
21. Safety Communication Center – A large communication board created to inform, educate, and provide a “center” for safety items such as the facility's MSDS binder.
22. Unstable – A chemical which in its pure state will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure, or temperature.
23. Water-Reactive – A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.
24. Workplace – A facility, job site, project, or a geographical location containing one or more work areas.

PROCEDURE:

- I. Material Safety Data Sheets
 - A. Material safety data sheets provide our employees with specific information on the chemicals they use.
 1. MSDSs are fact sheets for chemicals which pose a physical or health hazard in the workplace.
 - B. Material safety data sheets will be made available to all employees on all shifts.

Lake County Department of Utilities

1. The Department of Utilities utilizes an online MSDS management database, MSDS Online, to manage and update its chemical inventory.
 2. The Department Safety Manager coordinates the review and update of this list on a periodic basis to assure completeness and accuracy.
- C. MSDS binders are specific to each of the Department's locations and are updated annually, at minimum.
1. These binders are located on the Safety Communication Center at each facility.
 - a) The administrative and customer service offices maintain their MSDS Binders in their supply closets.
- D. Each employee receiving chemicals at a site must ensure that an MSDS for each chemical is provided at the time of delivery.
1. If the MSDS is not provided, the employee will refuse delivery of the chemical.
 2. Upon receiving the chemical, the employee will 3-hole punch the MSDS and update the facility's Master MSDS Binder.
- II. Procurement of New Chemicals
- A. Occasionally new chemicals will be needed to maintain a warranty on a new piece of equipment or to properly address a new manufacturing process or concern.
1. All new chemicals must be reviewed by the Safety Manager prior to bringing the chemical into the workplace.
 2. A Chemical Requisition Form will be used to request the new chemical.
 - a) Appendix A contains the Chemical Requisition Form.
 3. The employee requesting the new chemical must complete the form, attach a copy of the chemical's MSDS and mail or fax it to the Safety Manager for review.
 - a) For this exception only, a form must be completed for each individual chemical if requesting multiple chemicals.
 4. Exceptions will be made for emergency purchases only.
 - a) A Chemical Requisition Form must be completed and an MSDS attached for review by the Safety Manager as soon as possible.
 5. The Safety Manager will review the expected use of the new chemical, frequency of exposure and physical and health hazards.
 - a) Upon review, the Safety Manager will make a determination whether the chemical presents new or additional characteristics that could have adverse effects on the manufacturing process or the health and safety of employees.
 - (1) The Safety Manager will update the Department's chemical inventory upon approval of a new chemical.
- III. Labeling Containers
- A. All containers must be labeled in the workplace.

Lake County Department of Utilities

- B. Employees using chemicals are responsible for assuring that all in-plant containers are labeled and that labels are replaced as they become defaced from the containers or as the contents of containers change.
- C. If the containers label has worn off, becomes illegible or otherwise unreadable, a new label must be applied.
 - 1. The Department uses the HMIS labeling system for such containers.
 - a) Appendix B is an example of a blank HMIS label.
 - 2. Blank, self-sticking HMIS labels can be found on the Safety Communications Center.
 - 3. As long as the container has the original manufacturer's label in good legible condition, an HMIS label is not required.

IV. Training

- A. Information and training is a critical part of the Hazard Communication Program.
- B. Everyone who works with or is potentially exposed to hazardous chemicals will receive initial training and any necessary retraining on the Hazard Communications Program and the safe use of hazardous chemicals in the workplace.
- C. Whenever a new hazard is introduced or an old hazard changes, additional training will be provided.
- D. Training will include the following:
 - 1. An overview of the requirements of the Hazard Communication Program, including employee rights under the Regulation.
 - 2. Any operations in a workplace in which exposure to hazardous chemicals may occur under normal conditions or in a foreseeable emergency.
 - 3. The location and availability of the written Hazard Communication Program and MSDSs.
 - 4. The type of information contained in MSDSs.
 - 5. The details of the Department's container labeling system.
 - 6. The physical and health hazards of each chemical or class of chemicals in their work area.
 - 7. The methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area (e.g., continuous area monitoring devices, personal or area monitoring, characteristic odor or appearance of the hazardous chemical).
 - 8. How exposure can be minimized through engineering controls, work practices, or personal protective equipment, and the control measures.
 - 9. Emergency response procedures in case of leaks, spills, or reactions with heat or other chemicals to generate a hazardous chemical(s).
 - 10. First aid procedures to follow if employees are exposed to the material resulting from leaks or spills.
 - 11. Proper storage of hazardous chemicals.
 - 12. Proper disposal of chemicals.

V. Hazardous Non-routine Tasks

Lake County Department of Utilities

- A. Employees may be required to infrequently perform tasks, during which, exposure to hazardous chemicals may occur, and they are not sufficiently familiar with hazards associated with those tasks.
 - B. Before starting work on such projects, each affected employee will review the MSDS for the chemical(s) and be trained by a site supervisor in regards to the hazardous chemicals to which they may be exposed during such an activity.
 - C. The training must cover:
 - 1. The specific health and safety hazards of the chemicals to which employees may be exposed.
 - 2. The protective/safety measures that must be taken and the work practices that must be observed (such as requiring another employee to assist or be present).
 - 3. The emergency spill procedures and first aid procedures.
 - 4. The methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area.
- VI. Informing Contractors
- A. To ensure that contractors work safely, it is the responsibility of the Contractor's contact or contact's supervisor / superintendent to:
 - 1. Provide the contractors with MSDSs information for the chemicals to which they may be exposed while on the job site or workplace.
 - 2. Train the contractor in the same manner that new employees are trained.
 - 3. Obtain MSDSs information for the hazardous chemicals that the contractor brings to the job site which employees may be exposed and train employees who may be exposed to these chemicals.
 - B. This information exchange must be detailed in all contracts and conducted before work begins.

Lake County

Department of Utilities

APPENDIX A

This form is to be filled out for chemicals that are ordered for the **“FIRST TIME.”** It is meant to insure that Material Safety Data Sheets (MSDS) are available, and that all safety equipment, protective measures, and regulatory issues are in place prior to the chemical arriving on site. **It is not intended to prohibit the ordering of any chemical by employees** but rather to assure that the Department and its employees are complying with all pertinent legislation regarding the acquisition of chemicals. Thank you for your cooperation in filling out this form. Should you have any questions regarding your chemical order, please call the Safety Manager.

Responsible Individual: _____ Location: _____

Phone Number: _____

Date Requested: _____ Date Needed: _____

Name of Chemical & Manufacturer:

Amount to be ordered: _____ Frequency of Use: _____

HMIS Ratings:

Health	Fire	Reactivity	PPE

Storage Requirements (Circle applicable)

- General Chemical Storage
- Cool Dry Cabinet
- Refrigerator
- Freezer
- Explosion Proof Refrigerator
- Flammable Cabinet
- Corrosive Cabinet
- Other (describe) _____

Engineering Controls Needed (Circle if applicable)

- Chemical Fume Hood
- Local Exhaust
- Other(describe) _____

Lake County
Department of Utilities

Personal Protective Equipment

Protective eyewear (ANSI Z87.1)
Face shield
Gloves
Lab Coat
Respirator
(describe) _____
Other (describe) _____

Special Labeling Requirements

Carcinogen
Teratogen
Mutagen
Embryotoxin
Reproductive Hazard
Other

Is employee exposure anticipated? No Yes (amount)

Are workplace exposure levels anticipated? No Yes
(amount) _____

Signature of Responsible Individual

Date

Comments:

Safety Manager Approval

Date

Lake County
Department of Utilities

APPENDIX B

The image shows a standard Hazardous Material Identification System (HMIS) label. It features a yellow border with the text 'HMIS®' repeated along all four sides. The label is divided into several horizontal sections:

- Top Section:** A white rectangular area with the text 'HMIS®' centered.
- Health Section:** A blue horizontal band with the word 'HEALTH' in white, bold, uppercase letters. To the right of the text are two white square boxes for numerical ratings.
- Flammability Section:** A red horizontal band with the word 'FLAMMABILITY' in white, bold, uppercase letters. To the right of the text is one white square box for a numerical rating.
- Physical Hazard Section:** An orange horizontal band with the words 'PHYSICAL HAZARD' in white, bold, uppercase letters. To the right of the text is one white square box for a numerical rating.
- Personal Protection Section:** A white rectangular area with the text 'PERSONAL PROTECTION' in black, bold, uppercase letters.
- Bottom Section:** A white rectangular area containing the text 'HMIS® ©2001 NPCA · Printed by JJKA'.