#### **Hazard Communication Program**

### 1.0 Purpose:

1.1 The City of Lake Forest will be committed to preventing accidents and ensuring the safety and health of our employees while being Occupational Safety and Health Administration (OSHA) compliant. We will comply with all applicable federal and state health and safety rules. The Hazard Communication Program complies with OSHA standard, title 29 code of federal regulation 1910.1200. Under this program, workers will be informed of the requirements of the OSHA Hazard Communication Standard, the operations where exposure to hazardous chemicals may occur, and how workers can access this program, as well as labels and Safety Data Sheet's (SDS).

This program applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency. All work areas that involve potential exposure to chemicals are part of the communication program. Copies of the hazard communication program are available for review by any interested employee or visitor.

## **2.0 Scope:**

2.1 The goal of the Hazard Communication Program is to reduce the occurrence of workplace illnesses and injuries caused by hazard chemicals. The Program is designed to achieve this goal by providing information and training for employees who work with hazardous chemicals.

The City of Lake Forest maintains an online SDS management system that can be accessed by any City employee through the City Employee Website. There are no login barriers to access SDS information. The City's ebinder as well as thousands of other SDS sheets can be accessed via the <a href="link">link</a>.

The City of Lake Forest has established a list of all known hazardous chemicals within the organization, and will update as needed. Corresponding Safety Data Sheets (SDS) are also maintained for each chemical.

All employees subject to the standard must have a written hazard communication program.

The written program must:

- a. Describe how the criteria specified in the standard will be met for labels and other forms of warning for SDS and for employee information and training.
- b. Include a list of hazardous chemicals known to be present using the chemical or common name that appears on the appropriate SDS.
- c. Identify the methods used to inform employees of the hazards of non-routine tasks and hazards associated with chemicals in unlabeled containers in their work areas.
- d. Describe methods used to inform any contractor with employees in the workplace of hazards that may be exposed to and appropriate protective measures.

### 3.0 Hazardous chemicals Definition:

- 3.1 The Definition of "hazardous chemicals" as provided by OSHA is "any chemical which is a physical hazard or health hazard".
- 3.2 **Chemical physical hazard** characteristics include substances which are:
  - 1. Explosive
  - 2. Flammable
  - 3. Oxidizers
  - 4. Self-reactive
  - 5. Pyrophoric
  - 6. Self-heating
  - 7. Organic peroxides
  - 8. Corrosive to metal
  - 9. Gas under pressure
  - 10. Emits flammable gas
- 3.3 Chemical health hazards include substances which may cause:
  - 1. Acute toxicity
  - 2. Skin corrosion or irritation
  - 3. Serious eye damage or eye irritation
  - 4. Respiratory or skin sensitization
  - 5. Germ cell mutagenicity
  - 6. Carcinogenicity
  - 7. Reproductive toxicity
  - 8. Specific organ toxicity
  - 9. Aspiration hazards
- 3.4 Chemical environmental hazards include substances which may cause:
  - 1. Acute aquatic toxicity
  - 2. Chronic aquatic toxicity

Note: Further explanation can be found within the OSHA Hazard Communication Standard.

### 4.0 Safety Data Sheets (SDS)

4.1 SDS's are written or printed material concerning product hazard determination, which are prepared and distributed with chemicals by chemical manufacturers and distributors. The manufacturer or importer of a chemical is required by OSHA to develop a SDS that contains specific, detailed information about the chemical's hazard using a specified format.

The distributor or supplier of the chemical is required to provide this SDS to the purchaser. SDS formats can vary from source to source within the country depending on national requirements.

### 4.2 SDS's must contain the following:

- 1. Product identification
  - a. Identifies the chemical on the SDS as well as the recommended uses. It also provides the essential contact information of the supplier.
- 2. Hazard identification

- a. Identifies the hazards of the chemical presented on the SDS and the appropriate warning information associated with those hazards.
- 3. Composition/information on investigation on ingredients
  - a. Identifies the ingredients contained in the product indicated in the SDS, including impurities and stabilizing additives. This section includes information on substance, mixtures, and all chemicals where a trade secret is claimed.

#### 4. First-aid measures

- a. Describes the initial care that should be given by untrained responder to an individual who has been exposed to the chemical.
- 5. Fire-fighting measures
  - a. Provides recommendations for fighting a fire caused by the chemical.
- 6. Accidental release
  - a. Provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. It may also include recommendations distinguishing between responses for large and small spills where the spill volume has a signification impact on the hazard.
- 7. Handling and storage
  - a. Provides guidance on the safe handling practices and conditions for safe storage of chemicals.
- 8. Exposure controls/personal protection
  - a. Indicated the exposure limits, engineering, controls, and personal protective measures that can be used to minimize worker exposure.
- 9. Physical and chemical properties
  - a. Identifies physical and chemical properties associated with the substance or mixture.
- 10. Stability and reactivity
  - a. Describes the reactivity hazards of the chemical and the chemical stability information. Which are broken down into three parts
    - a. Reactivity
    - b. Chemical stability
    - c. Other
- 11. Toxicological information
  - a. Identifies toxicological and health effects information or indicates that such data are not available.
- 12. Ecological information
  - a. Provides information to evaluate the environmental impact of the chemical if it were released to the environment.
- 13. Disposal considerations
  - a. Provides guidance on proper disposal practices, recycling or reclamation of the chemical or its container, and safe handling practices.
- 14. Transport information
  - a. Provides guidance on classification information for shipping and transporting of hazardous chemical by road, air, rail, or sea.
- 15. Regulatory information
  - a. Identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS.

- 16. Other information, including date of preparation or last revision
  - a. Indicates when the SDS was prepared or when the last known revision was made. The SDS may also state where the changes have been made to the previous version. You may wish to contact the supplier for an explanation of the changes.
- 4.3 Typically, any SDS sheet can be accessed through the City's online SDS management system. The system is self-updating and replaces any outdated SDS sheets. If a sheet is not attainable, department supervisors should notify the Public Works Management Analyst.

The SDS online management system is accessible during any time or day through the Lake Forest employee website for employees to review. If you have any further questions about the SDS procedure, contact your supervisor.

#### 5.0 Labeling:

5.1 Container labels are the first and easiest place to look to see if the material an employee is working with is hazardous. Labels can quickly inform people what they need to know in order to properly protect themselves. Supervisors are responsible for maintaining the labels on the containers, including, but not limited to, tank, totes, and drums. This means that labels must be maintained on chemicals in a manner which continues to be legible and the pertinent information does not get defaced or removed in any way.

Employees trained and certified to ship hazardous materials and waste are responsible for proper labeling of containers that are prepared to be shipped.

- 5.2 The City of Lake Forest labeling procedures and policies are as follows:
  - 1. The supervisor that is responsible for receiving shipments will evaluate incoming containers.
    - a. Identify the substance
    - b. Appropriate hazard warning
    - c. Name and address of the manufacturer
  - 2. If the label does not represent the contents, the department supervisor will notify the manufacturer or distributor. If a hazardous substance is shipped without a label, the best option is to refuse the shipment until a label can be produced.
  - 3. If the label has been defaced or damaged, it should be replaced immediately.
  - 4. Labels will be removed only if they are incorrect or when the container is empty if it will be used for other materials. All supervisors are responsible for seeing that all containers used in their departments are labeled properly and remain legible.
  - 5. Unlabeled containers such as buckets or pails will only be used by the employee who poured the contents in and will be emptied at the end of the shift.

Supervisors have the responsibility to identify all known hazardous chemicals present in their work areas and be put on display. Labels that are displayed in worker areas must state:

- 1. Product identification
  - a. Identifies the product on the SDS.
- 2. Signal words

- a. Convey health, physical and environmental hazard information, assigned to the hazard class and category.
- 3. Hazardous statements
  - a. Standard phrases assigned to a hazard class and category that describes the nature of the hazard.
- 4. Pictograms
  - a. Symbols that have been incorporated into labels.
  - b. Includes harmonized hazard symbols plus other graphic elements.
- 5. Precautionary statements
  - a. Hazard information by briefly providing measures to be taken to minimize or prevent adverse effects from physical health or environmental hazards.
- 6. Supplier identification
  - a. The name and address of the manufacturer or other responsible party

In the event of an improperly labeled hazardous chemical container, a proper label will be requested from the supplier. Failure of a supplier to correct labeling deficiencies within 60 days may result in suspension of the use of the product.

No labels on incoming chemicals shall be defaced in anyway. Any employee identifying defaced or illegible labels must immediately report the information to a supervisor so that appropriate labels can be applied.

Should labels need to be applied, National Fire Protection Association (NFPA) color-coded system shall be used to label hazardous materials. These labels use colored triangles to indicate the type of hazard.

- a. Red means fire hazard
- b. Yellow means reactivity hazard
- c. Blue means a health hazard
- d. White areas of the label is used to provide additional information

**Note:** Changes to the labeling system will be communicated to affected employees. Employees who have questions about the precautionary labeling system should contact their immediate supervisor.

### 5.3 Pictograms and Hazard Classes

Hazard Symbols (to be used in pictograms for substances of the particular class)		
FLAME OVER CIRCLE—USED FOR THESE CLASSES:	FLAME—USED FOR THESE CLASSES:	EXPLODING BOMB—USED FOR THESE CLASSES:
<ul> <li>Oxidizers</li> </ul>	<ul> <li>Flammables</li> <li>Self Reactives</li> <li>Pyrophorics</li> <li>Self-Heating</li> <li>Emits Flammable Gas</li> <li>Organic Peroxides</li> </ul>	<ul><li>Explosives</li><li>Self Reactives</li><li>Organic Peroxides</li></ul>
	W December 1	
SKULL & CROSSBONES—USED FOR THESE CLASSES:	CORROSION—USED FOR THESE CLASSES:	GAS CYLINDER—USED FOR THESE CLASSES:
<ul> <li>Acute toxicity (severe)</li> </ul>	<ul><li>Corrosives</li></ul>	Gases Under Pressure
	*2	!
HEALTH HAZARD—USED FOR THESE CLASSES:	ENVIRONMENTAL HAZARD— USED FOR THESE CLASSES:	EXCLAMATION MARK—USED FOR THESE CLASSES:
<ul> <li>Carcinogen</li> <li>Respiratory Sensitizer</li> <li>Reproductive Toxicity</li> <li>Target Organ Toxicity</li> <li>Mutagenicity</li> <li>Aspiration Toxicity</li> </ul>	<ul> <li>Environmental Toxicity</li> </ul>	<ul> <li>Irritant</li> <li>Dermal Sensitizer</li> <li>Acute toxicity (harmful)</li> <li>Narcotic Effects</li> <li>Respiratory Tract Irritation</li> </ul>

**Note:** Small quantities intended for immediate use may be placed in a container without a label, provided that the individual keeps it in their possession at all times and the product used up during the work shift or properly disposed of at the end of the work day. However, the container should be marked with its contents.

# 6.0 **Employee Training**

6.1 The most important component for a successful hazard communication program is the training for all employees who use hazardous chemicals. Appropriate training and protective measures must be taken to protect employees. Department heads and supervisors will be trained regarding potential hazards or hazardous situations and appropriate protective

measures so they will be available to answer questions from employees and provide daily monitoring of safe work practices.

Prior to any work being performed by an outside contractor involving hazardous chemicals, the supervisor is to be advised.

- 6.2 The employee training program will cover the following topics:
  - 1. How to increase employee awareness of chemicals and other hazardous materials in their work area.
  - 2. The location of SDS's, how to read and interpret the information on both labels and SDS's, and how employees may obtain additional hazard information.
  - 3. Detail the Hazard Communication Standard pertaining to employees and their workplace environment.
  - 4. Understanding of the requirements in OSHA's Hazard Communication Standard.
  - 5. The location of the written hazard communication plan and where it may be reviewed.
  - 6. Any operations in employee work area where hazardous chemicals are used.
  - 7. Physical and health hazards of the chemicals in employee work areas.
  - 8. Methods used to detect the presence or release of hazardous chemicals in the work area.
  - 9. Steps employees have taken to prevent or reduce exposure to these chemicals.
  - 10. How employees can protect themselves from exposure to these hazardous chemicals through use of engineering controls/work practices and personnel protective equipment.
  - 11. An explanation of any special labeling present in the workplace.
    - a. What are pictograms?
    - b. What are signal words?
    - c. What are the hazard statements?
    - d. What are the precautionary statements?
  - 12. Emergency procedures to follow if an employee is exposed to these chemicals.
- 6.3 Supervisors are responsible to ensure that employees receive this training. After attending the training, employees will sign a form verifying that they understand the above topics and how the topics are related to our hazard communication plan. Employees who have not received this training will not be allowed to work in areas where hazardous chemicals or substances exist.

The assistant to the director of public works will review the training program on an annual basis and determine the appropriate training levels. Re-training of new chemicals that are exposed to employee work areas is required. It will be the City of Lake Forest policy to provide training regularly to ensure the effectiveness of the program. Employees that are reassigned or transferred to other work areas will undergo a review of specific hazard training in their new work area performed by their supervisor. Supervisors are responsible for scheduling and ensuring that this retraining session is conducted and initiated in a new work area.

**Note:** it is critically important that all employees understand the training. Any questions should be directed to their immediate supervisor.

## 7.0 Hazardous Non-Routine work:

7.1 Periodically, employees are required to perform non-routine task that are hazardous. Prior to starting work on such projects, each affected employee will be given information by their immediate supervisor about the hazardous chemicals he or she may encounter during such

activity. This information will include specific chemical hazards, protective, and safety measures the works should use and steps to reduce the hazards.

- 7.2 Some examples of non-routine work may include, but limited to:
  - 1. Welding and cutting operations
  - 2. Tank/container cleaning
  - 3. Accident scene clean-up
  - 4. Intensive maintenance activities
  - 5. Using internal combustion engines in enclosed areas
- 7.3 The following procedures will be used when employees perform non-routine work:
  - 1. The supervisor will determine the need for non-routine work and the hazards associated with the work.
  - 2. The supervisor will train the employees performing the non-routine work of the hazards associated with the work and of procedures to follow.
  - 3. Employees share in the responsibility by ensuing their supervisor knows that non-routine work will be performed.
  - 4. Employees should contact their supervisor with questions concerning non-routine work.

### 8.0 Contractors:

- 8.1 The City of Lake Forest, on occasion, may enlist the services of an outside contractor. When an outside contractor will be used, it will be the responsibility of the on duty supervisor to advise the contractor of any hazardous chemicals to which its employees may be exposed and the appropriate protective measures to be taken. Conversely, it will be the same person's responsibility to determine if the contractor will be using any hazardous chemicals during this work that would expose employees. The city and contractor shall provide each other a copy of the SDS and labeling information for the chemicals that are in use. Some information that will be included to the contractor:
  - 1. Specific chemical hazards and review of specific SDS.
  - 2. Protective safety measures the City of Lake Forest has taken to reduce the hazards, including but not limited to:
    - a. Ventilation
    - b. Respiratory protection
    - c. Presence of another employee
    - d. The establishment of emergency response procedures
- 8.2 The City of Lake Forest will communicate to the contractor that they must meet the requirements of 29 CFR 1910.1200 as a condition of the project. Supervisors will conduct the appropriate training for city employees as soon as the SDS information is available from the contractors that are using hazardous chemicals or substances.

### 9.0 Recordkeeping:

- 9.1 Employee exposure record contains the following information:
  - 1. Environmental monitoring or measuring of a hazardous substance or harmful physical agent

- 2. Biological monitoring results which assess the absorption of a toxic substance or harmful physical agent by body system but not including results which assess the biological effect of a substance.
- 9.2 SDS or chemical inventory or any other record which reveals where and when used and the identity of a hazardous chemical or harmful physical agent records concerning the identity of a substance or agent need not be retained for any specified period as long as some record of the identity of the substance or agent, where it was used, and when it was used is retained for at least thirty years and biological monitoring results designed as exposure records by specific OSHA standards shall be preserved and maintained as required by the specific standard.

### 10.0 Program Review

10.1 The City of Lake Forest will evaluate and reassess its hazard communication program annually to keep it updated and relevant for its employees. Revisions or changes to the program will be addressed to all employees that are effected.

## 11.0 <u>Distribution</u>

Employee Information website www.citylf.org.

created 5/96

reviewed 5/99, 5/05, 5/10, 5/15, 5/19