

## 17. HAZARD COMMUNICATION PLAN

#### 17.1 INTRODUCTION

The Occupational Safety & Health Administration (OSHA) requires facilities to adopt Hazard Communication Programs if employees are potentially exposed to hazardous chemicals under normal conditions of use or in a foreseeable emergency. Because St. John's University (St. John's) employees could potentially be exposed to hazardous chemicals in the workplace, St. John's is required to develop a Hazard Communication Program, including the development, implementation, and maintenance of a written Hazard Communication Plan. This Hazard Communication Plan is established to coordinate and administer the transmission of information concerning chemical hazards to all employees at St. John's Queens campus. It describes how St. John's complies with the requirements of OSHA's Hazard Communication Standard (HCS) under 29 C.F.R. § 1910.1200 and is designed to specifically address chemical hazards present at the Queens campus. Specifically, this Plan describes how St. John's obtains and uses safety data sheets (SDSs), labels products containing hazardous chemicals, <sup>6</sup> and trains employees about the hazardous chemicals they may be exposed to at St. John's Queens campus. A copy of OSHA's Hazard Communication Standard is included in Appendix A.

All St. John's employees at the Queens campus who may be exposed to chemicals are informed of the specific hazards of the chemicals in their work area and the appropriate protective measures to use when handling the chemicals. This information is conveyed through the implementation of this Plan, in addition to Hazard Communication training and onthe-job instruction. St. John's is committed to employee safety and requires all employees to follow this Plan and maintain their work areas accordingly. A copy of this Plan will be available to St. John's employees their designated representatives, representatives of OSHA and the National Institute for Occupational Safety and Health (NIOSH) upon request. In addition, other information required as part of St. John's Hazard Communication Program (e.g., SDSs and chemical inventories) is available to employees upon request. Requesting to see such information is an employee's right and no employee will be penalized in any way for asking to review it. Using this information is part of St. John's shared commitment to a safe and healthy workplace.

This program applies to all employees at St. John's Queens campus, whether part-time, full-time, and hourly or salaried. Students employed by St. John's while in the course of their work are also included. Sub-contractors hired for any reason who are using hazardous chemicals are also required to comply with program requirements. In addition, sub-contractors must inform St. John's if they are utilizing any hazardous chemicals which could endanger any nearby employees in the vicinity of work underway.

#### 17.2 REGULATORY OVERVIEW

OSHA requires employers to adopt a Hazard Communication Program if employees are potentially exposed to hazardous chemicals under normal conditions of use or in a foreseeable emergency. See 29 C.F.R. § 1910.1200(b)(2). Employers are required to develop, implement, and maintain a written Hazard Communication Plan which describes how the facility complies with OSHA requirements for identifying hazardous materials, Material Safety Data Sheet(s), and employee information and training. The program must also include:

- A list of the hazardous chemicals known to be present (the list may be compiled for the workplace as a whole
  or for individual work areas).
- The methods the employer will use to inform employees of the hazards of non-routine tasks, and the hazards associated with chemicals contained in unlabeled pipes in their work areas.

<sup>&</sup>lt;sup>6</sup> OSHA defines a "hazardous chemical" as any chemical that poses a physical or health hazard. See 29 C.F.R. § 1910.1200(c).



Because St. John's may produce, use, and/or store hazardous chemicals at its campuses in such a way that non-St. John's employees may be exposed (e.g., contractors) while working at St. John's, these workers must be:

- Provided with access to SDSs for hazardous chemicals to which they may be exposed to while working at St. John's.
- Informed of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in response to foreseeable emergencies (e.g., evacuation routes); and
- Informed of St. John's labeling system.

Where St. John's employees must travel between workplaces (i.e., their work is carried out at more than one geographical location) a copy of the written Hazard Communication Plan must be kept at the primary workplace facilities. See 29 C.F.R. § 1910.1200(e).

#### 17.3 RESPONSIBILITIES AND PERSONNEL

This chapter describes the responsibilities of designated personnel who play key roles in implementing the Hazard Communication Program at St. John's Queens campus.

#### 17.3.1 Hazard Communication Coordinator

The Hazard Communication Coordinator position is staffed by the University's Department of Environmental Health & Safety Director (located at the Queens campus) who is responsible for coordinating St. John's overall Hazard Communication Program, as follows:

- Coordinate training for all St. John's employees who use or may be exposed to hazardous chemicals in the workplace and ensure that all St. John's employees who handle chemicals receive training.
- Assist the SDS Coordinator (Facility Manager) at each campus in obtaining SDSs and maintaining the SDS binders, when necessary.
- Maintain the Master Chemical Inventory for the Queens campus.
- Specify the labels required on non-original containers (i.e., containers into which employees transfer hazardous chemicals) and process tanks (i.e., fixed equipment containing hazardous chemicals) upon request by a department supervisor, foreman, or academic department faculty or staff.
- Contact the manufacturer when a hazardous chemical container label does not meet the requirements of the HCS.
- Periodically review work areas to ensure that containers are properly labeled.
- Ensure the continued effectiveness of the Hazard Communication Program through periodic inspections of the workplace including labeling, training and record keeping.
- Maintain and update the written Hazard Communication Plan and training records, as necessary.
- Provide expertise on chemical handling and hazard communication requirements.



## 17.3.2 SDS Coordinator

The SDS Coordinator position at the Queens campus is staffed by the Director, Science Environmental Health & Safety, who is responsible for maintenance of SDS binders for all University departments and areas at the Queens campus. The SDS Coordinator reports to the Hazard Communication Coordinator and has the following responsibilities:

- Maintain records of the hazardous chemicals present at the Queens campus and develop a Chemical Inventory.
- Keep the Chemical Inventory current and submit updated copies to the Hazard Communication Coordinator.
- Ensure that a SDS is obtained for each new chemical purchased or brought onto the campus. Coordinate
  acquisition of SDSs with Purchasing or staff who are responsible for departmental purchases, and monitor
  receipt of SDSs that have been requested.
- Request a SDS for each chemical purchased for which a SDS is not currently available.
- Organize periodic chemical surveys to ensure that SDSs are on file for all hazardous chemicals.
- Ensure that the Hazard Communication Coordinator is made aware of hazardous chemicals stored on-site in significant quantities to ensure compliance with EPCRA reporting requirements and New York City Right-to-Know reporting.

## 17.3.3 Department Heads/Area Supervisors

Academic department heads and area supervisors are the most familiar with the employees working in, and the hazardous chemicals used and stored at the Queens campus. As such, they play vital roles in the maintenance of St. John's Hazard Communication Program by:

- Identifying all employees within their department who work with or are exposed to hazardous chemicals and ensuring that they attend Hazard Communication Training.
- Providing new employees who will use or be exposed to hazardous chemicals with information on the location of department/area SDS binders and procedures for accessing those SDSs.
- Maintaining records of the hazardous chemicals present in their department to help the SDS Coordinator keep the Chemical Inventory and SDS binders current.
- Developing departmental procedures to ensure that the provisions of this Hazard Communication Program are carried out within their department.
- Training new employees on the hazards and proper handling procedures for specific hazardous chemicals they will be using prior to use of the chemical.
- Train employees on the hazards and proper handling procedures for new or significantly reformulated hazardous chemicals prior to use of the chemicals.
- Before non-routine tasks are initiated, training employees on any special hazards associated with the task (see Chapter 7 for more information on non-routine tasks).
- Helping ensure that staff complete periodic chemical surveys as initiated by the SDS Coordinator to ensure that SDSs are on file in the department for all hazardous chemicals in the work area.
- Notifying the SDS Coordinator of the presence of a chemical in their work area, including any being used on a trial basis, for which a SDS is not available.



- Affixing labels (or oversee labeling), as necessary, to meet the labeling requirements described in Chapter 4
  of this Plan.
- Notifying the SDS Coordinator anytime an inadequate or improperly labeled container of hazardous chemical is received from a manufacturer.
- Properly labeling any hazardous chemical formulated on-site under their supervision after consulting with the Hazard Communication Coordinator regarding label content.
- Forwarding all SDSs received to the SDS Coordinator.

## 17.3.4 Human Resources Department

The Human Resources (HR) Department will work with the Hazard Communication Coordinator to ensure that new and transferred employees are provided with the appropriate training. HR will also inform new employees that if their position involves working with any hazardous chemicals they must attend the next Hazard Communication Training session.

# 17.4 HAZARDOUS CHEMICAL INVENTORIES AND MATERIAL SAFETY DATA SHEETS

## 17.4.1 Hazardous Chemical Inventories

The Hazard Communication Coordinator maintains the Queens campus Master Chemical Inventory which is a complete inventory of all hazardous chemicals currently used and/or stored at the campus. The Queens campus Master Chemical Inventory is included in Appendix B of this Plan. The SDS Coordinator maintains a Chemical Inventory for the campus and ensures that the inventory is kept up-to-date and that updates are provided to the Hazard Communication Coordinator, who will use these inventories to develop the Master Chemical Inventory for the campus (see Appendix C for a sample Chemical Inventory Form and How-To Sheet).

#### 17.4.2 Safety Data Sheets

Chemical manufacturers and distributors must evaluate hazards associated with the chemicals they produce and convey this information to purchasers by preparing and distributing Safety Data Sheets (SDS). Shipments of hazardous chemicals received by St. John's must be accompanied by SDSs. When chemicals are ordered, the department/person submitting the order is responsible for requesting a SDS from the supplier or manufacturer. Personnel receiving chemicals must request a SDS if one is not present with the shipment.

Binders of active SDSs are readily available to employees in the departments/areas where they work, as appropriate. Missing SDSs are obtained from suppliers and/or manufacturers of chemicals by the SDS Coordinators. As a general rule, SDSs kept on file are up-to-date. When a product's use is discontinued and no remaining product is on-site, the product's SDS is removed from the active SDS binder and put into an inactive SDS binder. In accordance with OSHA's access to employee exposure rules, St. John's will maintain SDSs for hazardous chemicals discontinued from use for at least 30 years. See 29 C.F.R. §§ 1910.1200(g) and 1910.1020(d)(1).

## 17.4.2.1 Content

St. John's uses SDSs provided by the chemical supplier. SDSs are in English and typically contain the following information:

- Identification
- Hazard(s) identification
- Composition/information on ingredients



- First-aid measures
- Fire-fighting measures
- Accidental release measures
- Handling and storage
- Exposure controls/personal protection
- Physical and chemical properties
- Stability and reactivity
- Toxicological information
- Ecological information
- Disposal considerations
- Transport information
- Regulatory information
- Other information

#### 17.4.2.2 Location

Binders of active SDSs are readily available to employees in the departments/areas where they work, as appropriate. For example, binders will be housed in each research and teaching laboratory and Fine Arts Studio, and anyplace else on campus where St. John's employees work with hazardous chemicals. The SDS Coordinator is responsible to document the location of each binder. In order to maintain proper document control (i.e., ensuring that all binders are updated) each SDS binder will be given an individual identification number. Additionally, each SDS binder will include a written log that documents the updating activity for that particular binder. Maintaining the binder log will be the responsibility of the SDS Coordinator (Facility Manager).

#### 17.4.2.3 Distribution

SDSs for all hazardous chemicals are immediately available to all employees upon request. Department heads and area supervisors ensure that they are readily available for review upon request and during emergencies. If exposure to a hazardous chemical occurs, a copy of the SDS is provided to the medical facility for use by health care providers.

#### 17.4.2.4 Trade Secret Information

Chemical manufacturers and importers may withhold the specific chemical identity, including the chemical name and other specific identification of a hazardous chemical, from the SDS if:

- It is a Trade Secret:
- The hazards are disclosed:
- The SDS indicates that the specific chemical identity is being withheld as a Trade Secret; or
- The specific chemical identity is made available to health professionals where a treating physician or nurse
  determines that a medical emergency exists and the information is needed for first aid or emergency
  treatment.

However, this information may be obtained from the manufacturer under certain circumstances.



In non-emergency situations, a chemical manufacturer must, upon written request, disclose a specific chemical identity or other trade secret information to a health care professional based on one of the following reasons:

- To assess the hazards of the chemicals to which employees will be or have been exposed.
- To conduct or assess monitoring of the workplace atmosphere to determine employee exposure levels.
- To conduct pre-assignment or periodic medical surveillance of exposed employees.
- To provide medical treatment to exposed employees.
- To select or assess appropriate personal protective equipment for exposed employees.
- To design or assess engineering controls or other protective measures for exposed employees.
- To conduct studies to determine the health effects of exposure.

To obtain trade secret information, the St. John's Hazard Communication Coordinator will contact the manufacturer by telephone to acquire the information without the use of written arrangements. If a written arrangement is necessary, a request will be sent to the manufacturer.

During an emergency, the manufacturer or importer will typically provide information required to assist in addressing the emergency or treating exposed individual(s). All exposures must be reported to the Hazard Communication/Environmental Health & Safety Coordinator. The Coordinator will seek additional information from the manufacturer or importer as necessary.

#### 17.4.3 Hazardous Chemical Determination

OSHA requires chemical manufacturers and importers to evaluate chemicals produced in their workplaces or imported by them to determine if they are hazardous. Employers are not required to evaluate chemicals unless they choose not to rely on the evaluation performed by the chemical manufacturer or importer for the chemical to satisfy this requirement. See 29 C.F.R. § 1910.1200(d). St. John's relies on manufacturers' SDSs to determine whether the products it uses are hazardous chemicals.

## 17.5 HAZARD COMMUNICATION LABELING

## 17.5.1 Labels, Labeling, and Warnings

Chemicals on-site are generally stored in their original or approved containers with proper labels clearly visible. St. John's ensures that all chemicals stored at the Queens campus are labeled, tagged, or marked with the following information, at a minimum:

- Identity of the hazardous chemical(s)
- Appropriate hazard warnings, or alternatively, words, pictures, symbols (or a combination thereof) which
  provide at least general information regarding the hazards of the chemicals.

St. John's ensures that the container labeling, in conjunction with other information immediately available (i.e., SDSs), will provide employees with the specific information regarding the physical and health hazards of each hazardous chemical they may be exposed to in their work areas. In general, St. John's attempts to label each chemical container with the name of the chemical and the hazards posed by the chemical, if any. It is St. John's policy for each container to be labeled.

Both original and new labels must comply with the following requirements:



- Labels and other forms of warning are to be legible, in English<sup>7</sup>, and prominently displayed on the container.
- New labels do not need to be added if existing labels already convey the required information.
- Labels must not be removed or defaced, unless the container is immediately marked with the required information.

Chemical hazard information can be depicted in a variety of ways. The NFPA (National Fire Protection Association) labeling system is based on a hazard rating of 0-4 for health, flammability, and reactivity. Specific hazards such as "oxidizers" and other instructions such as "no water for firefighting" are indicated in a diamond shape. The HMIS (Hazardous Material Information System) is also a hazard system which uses a 0-4 rating for health, flammability, and reactivity, but is laid out in rectangles. The bottom bar is for indicating appropriate personal protective equipment (PPE). These hazard warning systems are based with 0 being no known or minimal hazard to 4 being a severe or highly toxic hazard.

Hazard warning systems must convey specific health and/or physical hazards associated with the chemical, and may include information concerning target organs. The following are examples of acceptable descriptions of physical and health hazards:

## **Physical Hazards**

- Combustible Liquid
- Flammable
- Compressed Gas
- Explosive
- Oxidizer
- Water Reactive

#### <u>Health Hazards</u>

- Corrosive
- Nephrotoxin
- Sensitizer
- Skin Irritant
- Hepatotoxin

Shipments of incoming containers are inspected by St. John's employees to verify that the labels are intact and complete prior to use of the chemical. Containers that are not properly labeled will be returned to the manufacturer, and the manufacturer will be informed that the labels were inadequate.

## 17.6 TRAINING

All employees at St. John's Queens campus who work with or may be exposed to hazardous chemicals are trained on the safe use and handling of the chemicals to which they may be exposed, the federal HCS, and this Plan.

<sup>&</sup>lt;sup>7</sup> Information added to a chemical label in a language other than English may be used in areas where non-English speaking personnel work. However, at a minimum, each container must be labeled in English.



## 17.6.1 Training Requirements

Hazard communication training is required:

- Upon initial assignment to a work area involving hazardous chemicals use or exposure.
- When new hazardous chemical(s) are introduced to a work area or new information about a chemical is revealed. The SDS for the new or existing chemical shall be reviewed with the applicable employees.

See 29 C.F.R. § 1910.1200(h)(1).

## 17.6.2 Training Materials and Scope

Materials used for hazard communication training include:

- SDS for hazardous chemicals used at St. John's Queens campus; and
- Hazard Communication Training session.

Hazard Communication Training provided to St. John's employees includes the following:

- The provisions of the HCS and elements of this Plan.
- The location, availability, and details of this written plan and where the Chemical Inventories are maintained.
- The type of operations in work areas where hazardous chemicals are present.
- The location and availability of SDSs.
- The physical and health hazards of chemicals in the workplace; the methods of observations of detecting their
  presence or release (such as appearance and odor of the chemical, or the use of meters that monitor and
  alarm in the presence of chemicals in the workplace).
- The requirements for use and limitations of PPE and emergency procedures.
- The chemical labeling requirements and the use of the SDS as a source of chemical hazard information.
- The methods used by the NFPA and HMIS warning systems to explain the health, flammability, and reactivity hazards of materials.
- Non-routine tasks will be reviewed as to their possible chemical exposures. If a non-routine task poses a new
  or different hazard, employees will be informed of the hazards and required PPE in accordance with Chapter
  7 of this plan.
- Contractors on site will be informed of St. John's Hazard Communication program including St. John's labeling requirements, availability of SDSs (see Chapter 6 for more information on contractors), and evacuation/response procedures.

See 29 C.F.R. § 1910.1200(h).

Employees who handle hazardous chemicals will be informed of the methods for minimizing chemical exposure by their supervisors in their work areas. These methods will vary depending on the nature of the work performed, but may include:

- The use of personal protective equipment (PPE).
- Instructions on the use of emergency eye wash stations and their locations in employee work areas.



- Local and proper operation of localized exhaust used to minimize exposure to hazardous vapors and dust (e.g. fume hoods)
- Work practice controls and proper storage/handling of chemicals.
- Proper procedures to follow in the event of a chemical spill.
- Emergency first aid procedures in the event of hazardous chemical exposure.

#### 17.6.3 Records

Attendance sheets are completed by attendees at all Hazard Communication Training sessions for the purpose of documenting that employees have received training. The Hazard Communication Coordinator will maintain all Hazard Communication training records. If individual departments conduct additional task-specific training or training for nonroutine tasks, records will be maintained by the individual departments and/or supervisors.

#### 17.7 OUTSIDE CONTRACTORS

Prior to any outside contractor starting work within St. John's Queens campus, St. John's representatives will meet with the contractor and discuss the work to be done. The contractor will be advised of the following:

- Hazardous chemicals to which they may be exposed while on the job;
- Measures the contractor's employees may take to lessen the possibility of exposure;
- The labeling system used at St. John's;
- The availability of SDSs for all hazardous chemicals on file and where a copy may be obtained; and
- Evacuation/emergency response procedures.

The contractor will be informed that St. John's Hazard Communication Plan is available for review.

The contractor will be responsible for providing adequate safeguards so his/her employees can complete the work without endangering themselves or others. Contractors are expected to:

- have their own written Hazard Communication Plans and must be in full compliance with all applicable State and Federal requirements.
- to use signs, barricades and other appropriate means to keep unauthorized personnel out of the work area.
- have SDSs for all hazardous chemicals brought on-site immediately available.
- inform potentially affected St. John's employees of any hazards associated with the contractor's work to which they may be exposed.

#### 17.8 NON-ROUTINE TASKS

Non-routine tasks that involve potential exposure to hazardous chemicals that are not covered under the routine Hazard Communication Training will be handled on a case-by-case basis. Any non-routine work will be reviewed for potential exposure to hazardous chemicals by the Department Head or Area Supervisor. Prior to starting non-routine work, each employee will be given information through special training sessions or safety meetings about hazardous chemicals involved with such activities. This information will include:

- Specific chemical hazards; and
- Protective/safety measures the employee can take.



A procedure will be agreed upon detailing appropriate actions and safeguards to control exposure to any hazardous chemical. This procedure will be implemented whenever the work is being done.