SUNY Geneseo ENVIRONMENTAL HEALTH & SAFETY

Revision No.: 5	Approved by: Reyes
Title: Hazard Communication/Right-to-Know	Date: 1/2020
Program	
Updated by: Darlene Necaster	Pages: 1-8

I. Introduction

The State University of New York at Geneseo (SUNY Geneseo) is committed to providing a safe and healthful work environment for our faculty, staff and students. The Hazard Communication Standard (HCS) as found in 29 CFR 1900.1200 and NYS "Right-to-Know," 9 NYCRR Part 820 regulations are based on a simple concept—that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working¹. Such employees will make knowledgeable decisions and support protective measures such as product substitutions, engineered improvements and use administrative controls and personal protective equipment.

The five elements required of a written Hazard Communication Program are:

- Hazard Determination
- Chemical Inventory
- Container Labeling
- Safety Data Sheets
- Employee Training and Information

Copies of this program may be found in the Environmental Health and Safety (EHS) Office and on the EHS website. Employees and their representatives, as well as regulatory officials, are free to review the plan during normal business hours or on the web at any time.

II. Applicability

The procedures contained in this program are applicable to all employees of SUNY Geneseo who are exposed to or may be exposed to *hazardous chemicals* and *toxic substances*. Examples of hazardous chemicals can be found in:

- 29 CFR 1910, Subpart Z Toxic and Hazardous Substances, OSHA
- Threshold Limit Values for Toxic Substances and Physical Agents in the Work Environment, ACGIH
- National Toxicology Program (NTP), "Annual Report on Carcinogens"
- International Agency for Research on Cancer (IARC), "Monographs"

Portions of this program are applicable to suppliers of materials to SUNY Geneseo and contractors or vendors hired to perform work on the SUNY Geneseo campus.

III. Definitions

Acute exposure is usually a one time exposure causing adverse effects.

Chronic health effect is a result of small exposures over time causing adverse effects.

Hazardous chemicals are defined as any chemical which has a physical or health hazard.

Health Hazard means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute 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, agents which act on the hematopoietic system and agents which damage the lungs, skin, eyes, or mucous membranes.

Health Hazard	Definition
carcinogens	cancer causing
toxic	likely to cause death or serious physical
	harm
highly toxic agents	very likely to cause death or serious
	physical harm
reproductive toxins	affecting reproductive capabilities
	potentially causing mutations and
	teratogenesis
irritants	inflammation causing
corrosives	causes destruction of living tissue
sensitizers	causes allergic reaction
hepatotoxins	liver toxins
nephrotoxins	kidney toxins
neurotoxins	central nervous system toxins
toxins which act on the hematopoietic	organs and tissues involved with the
system	production of blood. May deprive body
	tissues of oxygen.
agents which damage the lungs, skin, eyes,	same
or mucous membranes	
mutagens	causing chromosomal damage
teratogens	causing toxic effects to fetuses

Types of Health Hazards and Meanings

Physical Hazard means 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 reactive or water reactive.

Physical Hazard	Definition
combustible liquid	flashpoint of $\geq 100^{\circ}$ F
compressed gas	gas exerting \geq 41 PSI (68° F) in a package
explosive	capable of releasing extreme gas and heat
flammable	flashpoint of $\leq 100^{\circ}$ F
organic peroxide	serious fire and explosion hazard, sensitive
	to friction heat and shock
oxidizer	a substance which supports combustion or
	will increase the rate of a
	combustible/flammable material
pyrophoric	capable of spontaneous combustion in air
	at a temp of <130° F
spontaneous combustion	the ignition of fire in an object by internal
	development of heat without the action of
	an external agent
unstable reactive	self reactive when exposed to shock
	pressure or temperature
water reactive	reacts with water to form flammable or
	toxic gas

Types of Physical Hazards and Meanings

For more detailed definitions, see <u>29 CFR 1910.1200 Appendix A</u>.

IV. Hazard Determination

Ways for determining whether chemicals or substances are hazardous can be done by examining the following:

- Labels and Markings (DOT placards & markings, NFPA diamond, HMIS labels, etc.)
- Safety Data Sheets
- Contact Manufacturer or distributor
- Review of PESH log

For more information on hazard determinations, see 29 CFR 1910.1200 Appendix B.

V. Chemical Inventory

Each department chair or director using hazardous chemicals and toxic substances at SUNY Geneseo is responsible for creating and maintaining a chemical inventory list and for sending such list(s) to the Environmental Health and Safety (EHS) Department. EHS compiles and maintains a master list, kept in the EHS office, which is sent to the Geneseo Fire Department, University Police and Livingston County Emergency Management.

VI. Container Labeling

Each department chair or director using hazardous chemicals and toxic substances at SUNY Geneseo is responsible for labeling and maintaining labels. Each container of hazardous chemicals or toxic substances shall be labeled, tagged or marked with the following information:

- Trade name or chemical name of the material (chemical symbols are not appropriate unless a chart or key is immediately available and on display)
- Appropriate hazard warnings (words, pictures, symbols, NFPA diamond, HMIS labels, etc.)
- Physical hazards
- Health hazards

When it is necessary to transfer the product into other containers, this label information must also be transferred. This may be accomplished by making a photocopy of the original container and fixing it to the transfer containers, or by manually transferring the information. Exemptions to this requirement are limited to:

- Portable containers into which materials are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer (i.e., mop buckets).
- Temporary laboratory containers need only be labeled as to the identity of their contents. Original containers, however, must maintain manufacturer's labels, which include additional information.
- Reactions vessels such as beakers, flasks, etc., which are intended to be under the immediate supervision of an individual and will be emptied and cleaned immediately after use.

VII. Safety Data Sheets (SDS)

The responsibility for obtaining SDS sheets is shared between Purchasing and the departments ordering the hazardous chemicals and toxic substances.

The Purchasing Department requests SDSs be forwarded with each initial product shipment. SDSs are also requested for purchases made through the Research Foundation. If the SDS is not received with the initial shipment, it is the responsibility of the ordering entity (department chair/director) to contact the manufacturer/distributor and acquire the SDS sheets and for sending such sheet(s) to the Environmental Health and Safety (EHS) Department. EHS compiles and maintains a master list, kept outside the EHS office (118 Clark), in a black five drawer filing cabinet, which is always kept unlocked. All SDSs are also maintained electronically by the EHS Department into the HRP EMIS server and can be found at: <u>https://emis2.geneseo.edu</u>

Users of the system must obtain a user name and password supplied by EHS. Although not required, it is highly recommended that users keep copies of safety data sheets on file in their respective areas in case of an emergency. If the server was inaccessible or if there was a utility outage, the HRP EMIS server would likely be unavailable.

While any verbal employee request for an SDS or other information will be honored as quickly as possible, in accordance with regulatory specification, any employee requesting an SDS will be provided one within 72 hours (3 working days) of stating the request in writing.

VIII. Employee Information and Training

Due to the varied nature of activities at SUNY Geneseo, it is assumed that all employees could possibly use or be exposed to a chemical or product that meets the regulatory definition of "hazardous" and/or "toxic." Therefore, sessions addressing the information and training requirements of the 29 CFR 1910.1200 and 9 NYCRR Part 820 will be offered annually. These training sessions may be specific to a small group (i.e., secretaries or Biology Teaching Assistants, etc.) or be more general in nature (Resident Director and Resident Assistant, Foreign Language Department, Sociology faculty, etc.). These sessions will be conducted by the EHS Department or other knowledgeable person(s), and will be offered at varying times and locations to accommodate the work schedules of campus personnel. They may include video presentations, oral descriptions, handouts, or other methods of conveyance. Interactive websites may also be used to facilitate the distribution of this information. Employees will be trained during initial assignment, annually or when new physical or health hazards are introduced.

The information conveyed to the employee presented at this training will include:

- OSHA's Hazard Communication Standard (HCS)
- Product labels and material safety data sheets
- Physical and health risks of hazardous materials
- Hazard determinations
- Employee rights guaranteed by the NYS "Right-to-Know" laws
- Locations, availability and how to read the information presented in SDSs, including physical hazards (flammability, reactivity, etc.), health hazards (routes of entry, target organs, acute versus chronic toxicity, and symptoms of overexposure), Threshold Limit Values (TLVs) and Permissible Exposure Limits (PELS)
- Detection and release of exposure (smell, visual observations) & emergency response
- How Personnel Protective Equipment (PPE) could be used to protect against certain hazards

New employees with a new assignment will be given an overview of the above information by their immediate supervisor or department chair prior to initial assignment. The Human Resources Department may also provide an overview upon hire, with the conveyance of understanding that EHS may be contacted for any additional information. Websites or handouts may also be used to inform new employees of this information.

Employee Notification of Hazards Associated with Performance of Non-routine Tasks

Identification of potential hazards associated with non-routine tasks is required and is the responsibility of the assigning supervisor(s) or department chair(s) and the assigned employee(s). Suitable protective equipment and/or other safeguards will be provided based on this assessment, which may include a consultation with the EHS, if necessary. If during the course of completing the non-routine task, the employee determined that a previously unrecognized hazard exists, or that the PPE is not sufficient, or any other safety or health related issue requires attention, it is the responsibility of that employee to immediately cease work and contact their supervisor to ensure the situation is corrected prior to continuing to perform the task.

The **"right-to-know" (RTK) law** in NYS expands the HCS by requiring employers to have "RTK" informational posters throughout the workplace. Additionally, employees must attend annual training on toxic substances and have the right to refuse work with a toxic substance if a written request is not responded to within 3 working days, and can do so without the fear of discrimination. Complaints may be made to the Department of Labor (Health and Safety Division) or the NYS Attorney Generals Office.

VIII. Contractor Notification

Prior to the commencement of State University Construction Fund contracted work, the Facilities Planning Office will inform the contractor of the presence of hazardous materials that may be encountered. The contractor is also required to provide information, including SDSs, on any hazardous materials they may bring to or use within the campus or campus buildings.

Contractors must also provide information on work they may perform that may create potentially hazardous situations for campus employees. This information should identify the work activity, its possible dates of occurrence, and preventative measures that will be employed by the contractor to control any potential hazards to campus employees and students and minimize impact on campus operations. Contractor emergency contacts should also be identified. The roles campus and local emergency response personnel would be expected to fulfill during any emergency must also be discussed.

Should other campus offices enter into contracts for construction or other work to be performed on the campus, that office is responsible for conveyance of information on hazardous materials and/or conditions both to and from the contractor.

IX. Responsibilities

It is the responsibility of every SUNY Geneseo employee to become knowledgeable in the hazards of their workplace. It is also the responsibility of every SUNY Geneseo employee to request information from supervisory personnel on any product they feel may present a potential health problem if used.

The Facilities Planning Office, Telecommunications, Department of Facilities Services or other offices are also responsible for the conveyance of required information both to and from contractors they have contracted with.

X. Global Harmonized System (GHS)

The OSHA Hazard Communications regulations have been updated to provide clearer information to everyone who uses chemicals. These changes now make this the "Right-to-Understand" regulation. The safety information provided on product labels and safety data sheets (formerly material safety data sheets or MSDSs) is now standardized and all manufacturers are required to use the same hazard warnings and precautionary statements for the same chemical. This will allow for consistency in the information that the user has available to them.

There are 8 new "pictograms" or hazard warning symbols that are required to be used on the labels. Most products will have a combination of 2 or more symbols. These pictograms will provide immediate safety information to the user. (OSHA QuickCard Hazard Communication Pictogram)



There is a new format for labels that will provide more information to the user. The information is more consistent between manufacturers and provide quick visual notations to alert the user, providing immediate recognition of the hazards. (OSHA Hazard Communication Standard: Labels and Pictograms)

The new safety data sheets (SDS) are standardized into a 16-section format. The manufacturer is required to use the standardized hazard and precautionary statements on the SDS. The SDS will now provide additional safety information to the user that will be consistent between manufacturers. (OSHA Hazard Communication)

Some manufacturers have already begun using the new label and SDS formats. Manufacturers have until June 2015 to have all products with the new labels and SDS formats. EHS has updated all chemical safety training to include the GHS (Global Harmonized System) and the new pictograms and SDS formats.

If you have any questions on the labels, SDS or other chemical safety questions, contact the Department of Environmental Health & Safety at 245-5663.