

SUNY Geneseo Employee Right-to-Know Reference Manual

What is "Right-to-Know"?

"Right-to-Know" is a general term for government laws and regulations which describe how workplace chemical hazards must be communicated to the worker. Hazardous Communication is the federal regulation. Right-to-Know Laws and regulations include additional requirements specifically for New York State public employees. The OSHA Laboratory Standard enforced by PESH in the NYS Public Sector, outlines specific requirements for communication of hazards in laboratories (including Art Studios). Copies of these regulations are available on OSHA and NYS regulatory web pages.

What is a "toxic" substance?

A toxic substance is defined differently in different regulations. The Right-to Know regulations have perhaps the most encompassing definition of toxic substances of any regulation. They are any substance currently listed on the National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances (RTE Cs), or has yielded evidence of acute or chronic health hazards in humans, or animal or other biological testing. This definition creates a list of over 167,000 substances. Some are commonly considered toxic (i.e., benzene, asbestos, methyl ethyl ketone), while others are not usually considered a health hazard, such as salt, sugar or water.

What are Employee Rights under Right-to-Know?

Employee rights are the major emphasis of the Right-to-Know regulations. These were developed under the premise that knowledgeable workers are able to make more reasoned decisions. The following employee rights are guaranteed under the Right-to-Know requirements:

Employees have the right to information on the toxic substances used in the workplace and the right to be notified of that right.

Posters notifying employees of their Right-to-Know are located throughout the campus. The posters identify the EHS as the contact for additional information. Information on the specific chemicals used in individual departments should initially be requested from the Department Chairperson or supervisor.

SUNY Geneseo also maintains a *Written Hazard Communication Plan*. A copy of the plan will be furnished to any employee making a written request for the document within 15 days of receipt of such request, as required by the Law. The *Written Hazard Communication Plan* is also available electronically on the EHS Website.

Employees have the right to attend training on the hazards of toxic substances.

The SUNY Geneseo Personnel Department provides safety training for new employees upon hire. Annual refresher training is provided by individual departments in consultation with the EHS. Additional chemical specific training will be provided if a new toxic substance is introduced into the workplace.

Employees have the right to refuse to work with a toxic substance if a written information request has not been responded to within three (3) working days.

A request form for information on a specific toxic substance is available in through your supervisor, or at the EHS. A written reply to a completed employee request for information is required to be made within 3 working days. If this written reply is a not made within 3 days, the employee has the right to refuse to work with the specific compound for which the request was made.

Employees have the right to exercise the rights guaranteed by the Right-to-Know Laws without fear of discrimination and to file a complaint with the New York State Department of Labor or the New York State Attorney General if they feel discrimination has occurred.

Employees who feel they have been subject to discrimination as a result of exercising any of the right guaranteed by the Right-to-Know regulations may file a formal complaint. These complaints should be directed to:

New York State Department of Labor, Safety and Health Division
109 South Union Street
Rochester, New York
(585) 258-4570

Office of the Attorney General
Civil Rights Bureau
120 Broadway, 3rd Floor
New York, New York 10271-0332
Tel: (212) 416-8250 FAX: (212) 416-8074
WEB SITE: <http://www.oag.state.ny.us> York State Attorney General

Other major requirements of Right-to-Know:

In addition to employee rights, Right-to-Know also requires all containers of toxic substances be labeled with the identity of the toxic substance(s) and any appropriate hazard warnings. It is the responsibility of the supervisor, department chair or individual researcher to ensure containers within their area of responsibility and authority are labeled with this information.

Chemical manufacturers and distributors are also required to provide information on the toxic materials they produce or distribute. The information on the toxic material is provided in a Material Safety Data Sheet (MSDS). It is the responsibility of the supervisor, department chair or individual researcher to ensure MSDSs for all products in used, maintained or stored within their area of responsibility and authority are available.

Material Safety Data Sheet (MSDS)

Although no specific format is required for data presentation within an MSDS, the following information is typically provided:

Chemical Identification

Chemical Name

Chemical Trade Name

Synonyms

Manufacturers Name and Address

Emergency Phone Numbers (in some instances)

Hazardous Ingredients

The concentration of the toxic components of the product.

Exposure limits for these components, most often listed as 'PELs or TLVs" or LD50.

PELs and TLVs = Permissible Exposure Limits (OSHA - legal standards) and Threshold Limit Values (ACGIH - recommended thresholds) are standards or guidelines of exposure below which employees may be exposed to without adverse effects. These exposure thresholds are usually expressed at parts per million (ppm) or milligrams per cubic centimeters (mg/m³), and are based on a time weighted average (TWA) for an 8 hour day/40 hour week. These are inhalation exposure thresholds only.

PELs for the NYS public sector are not the same as the federal OSHA PELs. NYS public sector PELs are listed in 12 NYCRR Part 800.

LD50 = Lethal Dosage 50%. The dosage at which 50% of the study population (usually mouse or rat) died. Expressed in mg of substance per kg of body weight. LD50 are typically oral or dermal dosages.

Some numbers for comparisons:

Chemical TLV or TWA

Formaldehyde 2 ppm

Benzene 10 ppm

Ammonia 25 ppm

Ethyl alcohol 1000 ppm

Important Point: The lower the PEL, TLV or LD50, the more dangerous the substance!

Physical Data

Chemical Characteristics

Color

Odor

Specific Gravity

Fire and Explosion Data

Extinguishing Media (foam, water, CO₂)

Flash Point

Flash Point = The lowest temperature at which sufficient evaporation occurs to create an ignitable mixture in the air above the liquid

FLAMMABLE: FP of less than 100°F (acetone, gasoline, methanol)

COMBUSTIBLE: FP between 100°F and 200°F (kerosene, formaldehyde)

Important Point: The lower the Flash Point the more likely a substance will ignite!

Health Hazards

Symptoms of overexposure

First Aid and emergency procedures in case of overexposure

May also list medical conditions that may be aggravated by exposure to the chemical

Target Organ(s)

Primary Routes of Exposure:

Absorption - Substance passes through the skin or other membranes. Rate of absorption is increased through damaged skin or membranes.

Inhalation - Substance enters the body through respiratory system, directly or indirectly through inhalation of contaminated smoking materials.

Ingestion - Substance enters the body through the digestive system, directly or indirectly through contaminated food or drink.

Injection - Substance enters the body through syringe injection or puncture wounds.

Point to Remember: Correct use of Personnel Protective Equipment can help prevent entry of substance into the body!

Local toxicity - The effect a toxic material has on the body tissues it directly contacts (dermatitis, acid/caustic burns, respiratory damage).

Systemic Toxicity - The effect a toxin has on body tissues or organs distal to the point of entry.

Acute Effect - A short term exposure which exceeds the ability of the body to protect itself.

Chronic Effect - Exposure over a long period of time for which the cumulative effect exceeds the ability of the body to protect itself.

Reactivity Data

Incompatibilities

Instabilities

Spill, Leak and Disposal Procedures

Clean-up procedures

Disposal Procedures

Protective Equipment

Personnel Protective Equipment

Ventilation requirements

Storage and Handling Precautions

Storage Requirements

Any additional warnings or precautions

Transportation Information

Specific data for labeling shipments

Important Point: MSDS's are available through supervisors, department chairs or researchers.

Container Labeling

All containers of toxic substances must be labeled as to the toxic contents, and their associated hazards.

The only exceptions to this requirement are:

- * food or cosmetics or other items regulated by the Food and Drug Administration
- * Laboratory containers are exempt from the hazard warning requirement, but must be labeled as to chemical identity
- * Portable immediate-use containers (must be constantly under control of individual who filled them - mop buckets)

SUNY Geneseo-specific Summary

Each SUNY Geneseo employee has the Right-to-Know of the toxic chemicals used in their workplace and any hazards associated with these chemicals.

Specific hazards associated with the SUNY Geneseo support services include: asbestos, bloodborne pathogens, PCBs and radioactive sources used in science research. These hazards are not typically encountered during the performance of routine tasks by most employees. However, to increase employee awareness and knowledge of their workplace, the following information is provided. Entry into locations containing these hazards by personnel other than those knowledgeable in management of the hazards, is prohibited.

Asbestos in Asbestos Containing Building Materials (ACBM)

Asbestos Containing Building Materials (ACBM) were used commonly as building materials requiring fire retarding properties, sound absorbency, or thermal insulation until the mid-1970's. As a result ACBMs are present in most of the buildings at SUNY Geneseo. OSHA requires that building materials in all buildings built prior to 1980 be treated as if they contain asbestos until analytical testing, following specified protocols, proves otherwise.

Asbestos is identified as a health hazard in its friable (loose fibers) state, when the OSHA threshold of 1.0 fibers per cubic centimeter is exceeded. ACBMs should not release asbestos fibers unless disturbed by construction or other demolition activity. When this occurs, preventative measures, which may include the construction of plastic containment structures, must be employed to prevent distribution of fibers. Air testing is required to ensure the levels of asbestos fibers remaining after completion of asbestos disturbing activities is below the allowable levels prior to removing the containment structures.

SUNY Geneseo has a certified asbestos abatement team to respond to situations involving the disturbance of ACBM.

Polychlorinated Biphenyls (PCBs)

In 2000, the last campus transformer known to contain PCBs was removed from the campus. On occasion, an old piece of equipment may be found in storage that has the potential to contain PCBs. Should such a piece of equipment be found, EHS is to be contacted so that oil testing can be arranged.

Radioactive Sources

Low level radioactive sources are used in the science buildings at SUNY Geneseo for research activities. The SUNY Geneseo Radiation Safety Committee and a Radiation Safety Officer ensure radioactive materials are used, handled and stored safely. The radioactive sources are located in labeled rooms in the ISC and Bailey.

Bloodborne Pathogen Awareness

Bloodborne Pathogens are not specifically associated with support services or research, but rather are an issue all employees should be informed of. Bloodborne Pathogens include the viruses associated with Hepatitis B and HIV (the virus responsible for AIDS). The presence of these pathogens necessitate precautions when responding to an emergency situation involving the release of body fluids (i.e., blood). If you are the first to arrive at an emergency, take measures to protect yourself, as well as the injured parties. Do not contact another person's body fluids. If the victim is conscious, hand them something (tissues, towel, article of clothing, etc.) to use to apply pressure to stop the bleeding. First aid kits are maintained in each building on campus. These kits contain gloves for response to emergencies. Call University Police.

Hazardous Waste

The SUNY Geneseo Campus, in its continuing efforts to maintain an environment safe for all campus personnel, disposes of hazardous wastes at various times throughout the year. On occasion, the specific wastes or the volume of wastes generated place the campus in the regulatory classification of "Large Quantity Generator". The current regulations define a Large Quantity Generator as a facility which generates or stores more than one pound of compounds such as arsenic or 2,4-dinitrophenol per calendar month.

The regulations specify requirements for Large Quantity Generators (LQGs). These include:

Preparation of a Contingency Plan for Emergencies involving Hazardous Wastes (6 NYCRR Part 373-3.4)

Preparation of a Preparedness and Prevention Plan (6 NYCRR Part 373-3.3)

Employee Training in their respective roles in implementing the above Plans (6 NYCRR Part 373-3.2)

For other than University Police personnel, the only training required is quite simple:

If a situation involving hazardous wastes occurs (spill, fire, etc.), leave the area and call University Police.