



POLICY ON

HAZARD COMMUNICATION & TRAINING

The U.S. Department of Labor's Occupational Safety and Health Administration have issued regulations concerning hazardous substances in the workplace. These regulations, often referred to as the Hazard Communication Standard, establish requirements for chemical manufacturers and for employers who use chemical products in their workplace. ConnOSHA has adopted these regulations for municipalities.

The requirements are intended to ensure that the hazards of all chemical substances are evaluated, and that information regarding potential hazards is made available to employees who may use or come in contact with these substances. Both the Town Emergency Manager and your department will maintain Material Safety Data sheets (MSDS) for hazardous materials which may be present in your area. These forms for your review and you are encouraged to review them.

Your employers are required to provide you with proper information and training regarding any hazardous chemical substances in your workplace. The responsibility for ensuring that you receive this information and training rests with your department director.

Town of East Hartford Hazard Communication Program

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1. Purpose and Goals

- 1.1 This program is intended to ensure that our employees are informed and properly trained regarding the potential chemical hazards of their work. The program also is intended to ensure compliance with the OSHA Hazard Communication Standard.
- 1.2 The goals of this program are to reduce injuries, accidents, chemical exposures, and to preserve the health and well being of Town employees.

2. Generally

2.1 Program

1. This program covers employees and contractors of the Town of East Hartford and the East Hartford Board of Education (hereinafter “the Town”), who may be exposed to hazardous chemicals during the course of their work on Town-owned property.

2.2 Hazard Determination

1. The Town will depend solely on the Material Safety Data Sheet provided by the supplier of materials purchased to determine hazard.

For in-house materials produced or mix by the Town employees, the MSDS for the raw materials will be used for hazard determination.

2. All MSDS’s will be reviewed by the department as received. A copy will be kept by the department and a copy sent to the Emergency Manager/LEPC Chairperson for the MSDS master file.

3. Program

3.1 Labeling

1. Each material entering the facility must be labeled with the following information:
 - A. Identity of the hazardous material (e.g. Tradename)
 - B. Appropriate hazard warnings, including acute and chronic symptoms and target organs
 - C. Name and address of the manufacturer

It will be the responsibility of each employee using the material and the supervisor responsible for the area to assure that this information is on all containers.

3.2 In-House Labeling

1. Containers that will be used to hold hazardous materials and have been filled in-house shall bear the same information as the original container except for the name of the manufacturer.
2. It shall be the responsibility of the employee using the material and supervisor to assure the appropriate warning label is present.
3. The supervisor in each area shall be responsible for ensuring that all containers are properly labeled.
4. Containers for immediate use by the employee drawing the material need not be labeled.
5. All tanks, hoppers and vessels will be labeled with the appropriate sign similar to the labels found on the parent container, or having hazard warnings appropriate to the material.

3.3 Material Safety Data Sheets (MSDS)

1. MSDS's will be requested for all materials used by the Town. This will be done by the Purchasing Department and/or the department ordering the product.

A separate MSDS master list manual will be kept with the Emergency Management Coordinator/LEPC Chairperson.

2. It will be the responsibility of the Supervisor to receive, review new or revised MSDS'S, issue copies to any outside contractor if appropriate. The Supervisor must review the MSDS with any current employees and then file a copy at the location.
3. If an employee wants a copy of an MSDS, he/she may request it formally from his/her supervisor. A copy of the MSDS will be provided to him/her as soon as practical.

3.4 Written Program

1. The written Hazard Communication Program will be kept at each location and will be made available for employee's inspection on request. The written Hazard Communication Program will also be made available to the employee's designated representative and any representative from OSHA. Labor for OSHA, and the Director of NIOSH.

3.5 List of Hazardous Materials

1. An alphabetized index of hazardous materials will be kept in the front of each MSDS book.

4.1 Employee Information and Training

1. The Town will inform and provide training for all employees who work with or could be exposed to hazardous materials that are present in their work areas. Current employees will be trained by the Emergency Management Coordinator. New employees will be trained prior to being exposed to any hazardous materials in their work areas and whenever a new hazardous material is introduced into the workplace. The Supervisor will be responsible for this additional training. Supervisors can request to borrow a Haz-Com Training tape from the Risk Manger or Emergency Management Coordinator.
2. For hazards which require the use of respirators, training will be provided as outlined in the Town's Respiratory Protection Program.
3. Each Department will post in the areas where the Hazardous Materials are present the following:
 - a. List of Hazardous in alphabetical order
 - b. Copy of MSDS's in alphabetical order
 - c. Copy of this Hazardous Communication Standard Program

4.2 Training

1. The training program will consist of the following:
 - a. Explanation of the OSHA Hazard Communications Standard
 - b. The Town's Hazard Communication Program
 - c. Methods by which employees can detect the presence or release of hazardous materials
 - d. The health and physical hazards of the materials used.
 - e. The methods which employees can take to protect themselves from hazardous materials. This will include:
 - Use of personal protective equipment
 - Engineering controls in place
 - Work practices
 - Air sampling results

5. Piping

- 5.1 The hazards of the materials contained in the unlabeled pipes were identified in past training sessions. The only materials used in piping systems by the Town are:
- a. The diesel fuel lines for the emergency generator
 - b. The compressed air lines
 - c. The hydraulic oil lines
 - d. Natural Gas
 - e. Steam

6. Outside Contractors

- 6.1 Outside contractors will be notified of any hazardous materials present in the areas in which they will be working by the Facilitates Manager and/or the Supervisor.
- 6.2 In addition, the contractor shall be required to notify the Town of any hazardous materials or activities to which he may expose Town employees.
- 6.3 The contractor should also be able to provide proof that their employees were trained in accordance with the requirements of the OSHA Hazard Communication Standard.

7. Department Director and/or Supervisors

- 7.1 **Hazard Determination-** Identify all materials used in your department that, if released from their container, present a potential threat to people or the environment. Eliminated from the standard are consumer products in their end user form such as white out, elmers glue, etc. A master list of all these hazardous material must be sent to the Town Emergency Manager accompanied by a MSDS (material safety data sheet).
- 7.2 **MSDS (Material Safety Data Sheets) -** For all the hazardous chemicals identified, an MSDS must be secured from the supplier and filed in a central location within your department. A copy of the MSDS sheet must also be sent to the Town Emergency Manager. If you do not have an MSDS for a product, you should call for an updated MSDS. When ordering a hazardous material that requires an MSDS, let the Purchasing Department know and they will stamp the purchase order to request an MSDS with the order. If the MSDS is not received with the order, do not sign the purchase order for payment and notify the supplier at once to send you an MSDS. All MSDS'S must be kept for thirty years.
- 7.2A Contractors who bring hazardous chemicals on site must provide an MSDS for those chemicals before work begins. Likewise, contractors must be informed of any hazardous chemicals to which they may be exposed.

7.3 **Labeling-** All hazardous chemicals must be labeled with the product identity, a hazard warning, and the supplier of the product. This includes the original container and any breakdown container stored or used by your department. You do not have to label portable containers if transferring for immediate use, provided the container will not be stored, left unattended and is properly rinsed after use.

7.4 **Container Break-Downs-** You must identify who will be responsible for transferring hazardous products to smaller containers (one or two specific employees). This person will ensure all breakdown containers are labeled as stated in number 7.3 above.

7.5 **Training-** All employees must be trained in hazardous chemical product handling, the hazard potentials, and emergency procedures. Sources of training:

- a. MSDS- discuss and read through the Material Safety Data Sheets with your employees.
- b. Suppliers- are required to provide specific training on their products if requested.

This training must be completed before an employee is assigned to work in any area where there is a potential for exposure to any hazardous chemical.

7.6 **Written Plan-** You must document how the above requirements will be met. A copy of your department plan must be kept in your department and copies sent to the Risk Manager and the Emergency Manager.

The basic reason for this standard is to ensure that all persons in your work environment are aware of potentially hazardous chemicals, proper handling of these chemicals and what to do in an emergency.

Glossary of Terms and Abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists

Acute Hazard: The short term effects of overexposure. Severe, usually crucial, often dangerous conditions in which relatively rapid changes are occurring.

Aerosols: Liquid droplets or solid particles dispersed in air, that are of fine enough particle size (0.01-100 micrometers) to remain so dispersed for a period of time.

Aqueous: Water

Carcinogenic: Refers to the ability of a chemical to cause cancer. There are three recognized bodies for evaluating chemical carcinogens: The National Toxicology Program, NTP; and the Occupational Safety and Health Administration, OSHA. The first two groups publish reports or lists of their evaluations which are referred to in this field.

CAS: Chemical Abstract Service

Chronic Hazard: The long term effects of overexposure.

CO, CO₂: Carbon Monoxide, Carbon Dioxide

Combustible Liquid: A liquid having a flash-point above 100° F but below 200 F.

Compressed Gas: A gas or mixture of gases having an absolute pressure exceeding 40 psi at 70 F, or 104 psi at 130 F, or a liquid having a vapor pressure above 40 psi at 100 F.

CONC: Concentration

Corrosive: A chemical that causes visible destruction of or irreversible alterations in living tissue, (e.g. burns) at the site of contact.

Cyanosis: Blue appearance of the skin, indicating a lack of sufficient oxygen in the arterial blood.

DECOMP: Decomposition

DERMATITIS: Inflammation of the skin from any cause.

DERMATOSIS: A broader term than dermatitis, it includes any cutaneous abnormality.

DISPOSAL: Unless otherwise noted, always consult Federal, State, and local regulations for acceptable disposal methods.

DOT: Department of Transportation

DUSTS: Solid particles generated by handling, crushing, grinding, impact, etc. They do not diffuse in air but settle under the influence of gravity.

DYSPNEA: Shortness of breath. Difficult or labored breathing.

EXTINGUISHING MEDIA: The appropriate types of fire extinguishers to be used to contain or put out the fire, specific for a particular type of material.

EXPLOSIVE: A chemical that causes a sudden, almost instantaneous release of pressure. Gas or heat when subjected to a sudden shock, pressure or high temperature.

FIBROSIS: A condition marked by increase of interstitial fibrous tissue.

FIRST AID: The most effective means of treating contact and over-exposure to a chemical/product. The information is printed in the size limitation of the computer data base and can be count on the MSDS. In some cases there may be notes to the physician which will not be included in this MSDS summary. The original MSDS from the manufacturer is available from the safety department should any additional information be needed. For further information contact the emergency number on the MSDS or call the local poison control center.

FLAMMABLE AEROSOL: Having a flame extension exceeding 18 inches at full valve opening or a flash back (flame extending back to the valve) at any valve opening.

FLAMMABLE GAS: At ambient temperature forms a flammable mixture with air at 13 volume percent or less.

FLAMMABLE LIQUID: Having a flash-point below 100 F.

FLAMMABLE SOLID: A material other than a blasing agent or explosive that is liable to cause a fire through friction, absorption of moisture, spontaneous chemical charge, or can be ignited readily.

FLAMMABLE LIMITS: Flammable liquids have a minimum concentration of vapor in air below which propagation of flame does not occur on contact with a source of ignition. This is known at the lower flammable explosive limit (LEL). There is also a maximum proportion of vapor of gas in air above which propagation of flame does not occur. This is known as the upper flammable explosive limit (UEL).

FLAMMABLE OR EXPLOSIVE RANGE: The difference between the LEL and the UEL expressed in terms of percentage of vapor or gas in air by volume.

FLASH POINT: The lowest temperature at which a liquid give off enough vapor to form an ignitable mixture with air and procedure a flame when a source of ignition is present. Two tests are used open and closed up.

FUME: Airborne dispersion consisting of minute solid particles arising from the heating of a solid body.

FUME FEVER: An acute condition caused by a brief high exposure to freshly generated fumes of metals. Symptoms are similar to flu and include chills.

GASTRITIS: Inflammation of the gastro-intestinal tract or stomach.

HAZARDOUS POLYMERIZATION: Conditions to avoid which may result in a large release of energy.

HEM/HEMATO: Pertaining to blood. An example would be the definition of hematuria means the presence of blood in urine.

HEPATITIS: Inflammation to the liver.

IARC: International Agency for Research on Cancer

INGESTION: The process of taking substances into the body orally, as food, drink, medicine, etc.

IRRITANTS: Chemicals which are not corrosive but are capable of causing a reversible inflammatory effect on living tissue at the site of contact.

LC50: The Lethal Concentration by inhalation that will kill 50% of the test animals.

LD50: The Lethal Oral Dose that produces death in 50% of the test animals.

LEUKOPENIA: A serious reduction in the number of white blood cells.

MEDICAL CONDITIONS AGGRAVATED: This means existing medical conditions that a person might have that could be aggravated by exposure to this chemical/substance. These conditions place the user at an increased risk from exposure to the product.

MG/M3: Milligrams per cubic meter- concentration unit for dusts, rarely used now.

MPPCF: Millions particles per cubic foot - a concentration term for dusts.

NA: Not applicable, category is not appropriate for this product. Can also mean not available.

NARCOSIS: Stupor or unconsciousness produced by chemicals.

NCI: National Cancer Institute

ND: Not Determined

NDA: No Data Available

NE: Not established/ None Established

NECROSIS: Destruction of body tissue

NEOPLASM: A cellular outgrowth which is characterized by rapid cell growth. May be benign or malignant.

NEPHR/NEPHRO: Relating to the kidney.

NEPHRITIS: Inflammation of the Kidney.

NEURITIS: Inflammation of a nerve.

NF: None Found

NK: Not known/None Known.

NTP: National Toxicology Program- US Department of Health and Human Services. They prepare an Annual Report on Carcinogens.

ONCOGENIC: Tumor generation

ORGANIC PEROXIDE: An organic compound that contains the bivalent O-O structure and which may be considered to be a structural derivative of hydrogen peroxide.

OTHER: Any other recommended exposure limit. Sometimes recommended by the manufacturer if there is no PEL or TLV. A "P" means the limit following is an OSHA peak limit. An "S" means the limit following is a short-term set by ACGIH.

OV: Organic Vapor.

OXIDIZER: A chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials examples: oxygen, chlorine, sodium hypochlorite.

PATHOGEN: Any microorganism capable of causing disease.

PEL: Permissible Exposure Limit, the time-weighted average exposure limit established by OSHA that employees are permitted repeated exposure during any 8 hours per day, 5 days per week. These materials are listed in Table Z-1, Z-2 or Z-3 of the OSHA regulations. A "C" denotes the ceiling limit, which must never be exceeded.

PH: Used to express the degree of acidity or a alkalinity- neutral is 7, strong acid 1 to 2, strong base 13 to 14.

PHYSICAL STATE: L= Liquid S= Solid A= Aerosol
G= Gas CG= Compressed Gas

PNEUMO/PULMO: Pertaining to the lungs.

PNEUMOCONIOSIS: Dusty lungs, resulting from chronic inhalation of dusts.

PPB: Parts per billion.

PRODUCT NAME: The trade name of the material as reported on the material safety data sheet. This name is also found on the product label.

PYROPHORIC: A chemical that will ignite spontaneously in air at a temperature below 130 F.

REACTIVITY/INCOMPATIBILITY: Stability indicates whether the material will react violently under the conditions specified. Incompatibility indicates material to avoid which may create unstable conditions.

RCRA: Resource Conservation Recovery Act

REPRODUCTIVE TOXINS: Chemicals that adversely affect the reproductive system or the developing fetus.

RHINITIS: Inflammation of the mucous membrane lining of the nasal passages.

ROUTES OF ENTRY: Refers to how the chemical/ contaminant enters the body. Examples are absorption through the skin, oral ingestion, or breathing/inhalation.

RTECS: Registry of Toxic Effects of Chemical Substances

SCBA: Self Contained Breathing Apparatus

SENSITIZATION/SENSITIZER: A chemical which will not cause a reaction on first exposure, but subsequently some individuals may develop an allergic type of reaction. Causes allergic reaction after repeated exposure.

SKIN: A “skin” notation either after the PEL or TLV means that the material can be absorbed through the intact skin in significant amounts.

SOLVENT: An organic substance which dissolves another substance. This substance can include water, but for the purpose of these guidelines does not.

SPECIAL FIRE FIGHTING PROCEDURES: Explains the protective equipment and procedures for firefighters to protect themselves from combustion products.

SPECIAL PRECAUTIONS: Includes any relevant information not previously mentioned. This section can be used to furnish additional precautionary statements. Continuation of information in other areas may be necessary because the provided space did not permit completion.

SPILL HANDLING: Precautions to be taken and methods of clean up and disposal of material in case of spillage of the product.

TARGET ORGAN: The part of the body affected by the chemical.

TIME-WEIGHED AVERAGE EXPOSURE/TWA: An average over a given period of an employee’s exposure.

TLV/THRESHOLD LIMIT VALUE: The time-weighted average concentration recommended as an exposure limit by the American Conference of Governmental Hygienists (ACGIH). This is the concentration to which nearly all workers may be repeatedly exposed, day after day, without adverse effect. A “C” means a ceiling limit not to be exceeded.

TOXIC: For our purposes, poison or disease producing.

TSCA: Toxic substances Control Act- EPA inventory of toxic substances.

UNSTABLE: A chemical which in the pure state, as it is utilized or transported will vigorously polymerize, decompose, condense or will become self-reactive under conditions of shock, temperature or pressure.

URETHR/URETHRO: Relating to the bladder.

VAPOR PRESSURE: Pressure exerted by vapor. The higher the vapor pressure, the more volatile a material is.

VAPORS: Gaseous form of substances that are normally in the solid or liquid state.

WATER-REACTIVE: A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.