



TOWN OF MAMMOTH LAKES

Hazard Communication Program

Table of Contents

Purpose	3
Responsibilities.....	3
General Program Information	5
Employee Training	5
Non-Routine Tasks	6
Off-site use or transportation of chemicals	6
General Chemical Safety	6
Task Evaluation	7
Chemical Procurement Procedures	7
Chemical Storage.....	7
Container Labels.....	8
Emergencies and Spills.....	8
Housekeeping	9
Contractors	9
Definitions	9
MSDS Information	13
Uniform Labeling System.....	15

Purpose

The Town of Mammoth Lakes Hazard Communication Program provides detailed safety guidelines and instructions for receipt, use, and storage of chemicals at our facilities by employees and contractors. Reference: OSHA Standard 1910.1200, California Code of Regulations, Title 8, Section 5194, ***Hazard Communication***.

Responsibilities

Management

- Ensure compliance with this program.
- Conduct immediate corrective action for deficiencies found in the program.
- Maintain an effective Hazard Communication training program.
- Make this plan available to all employees.

Operating Departments

- Ensure all received containers are properly labeled and that labels are not removed or defaced.
- Ensure all shipped/returned containers are properly labeled.
- Obtain, from the manufacturer, Material Safety Data Sheets (MSDS) for chemicals purchased from retail or other sources.
- Ensure received MSDS are properly distributed.
- Maintain MSDS Binder and a list of Hazardous Chemicals using the identity that is referenced on the MSDS and update the list as new chemicals are obtained or discontinued and review annually.
- When products are discontinued or MSDS are revised, forward those MSDS to the Personnel and Risk Manager or designated Safety Coordinator for updating the Town of Mammoth Lakes Master Binder and Hazardous Chemicals List and 30 year retention.
- Printed MSDS and labels may be printed and maintained in binders by the departments in their HAZCOM centers if desired.

Personnel and Risk Manager or Designee

- Monitor the effectiveness of the program.
- Conduct annual audit of the program.

- Monitor employee training to ensure effectiveness.
- Keep management informed of necessary changes.
- Ensure MSDSs are available as required and for emergency medical personnel when treating exposed employees.
- Monitor facility for proper use, storage, and labeling of chemicals.
- Provide information, as requested, concerning health effects and exposure symptoms listed on MSDSs.
- Maintain Town of Mammoth Lakes Master MSDS Binder, archived MSDS, and Hazardous Chemicals List.

Supervisors

- Comply with all specific requirements of the program.
- Provide specific chemical safety training for assigned employees.
- Ensure chemicals are properly used, stored, and labeled.
- Ensure only the minimum amount of chemicals/materials necessary are kept at work stations.
- Ensure up to date MSDS are readily accessible to all employees on all shifts.
- Send MSDS with injured employee to emergency medical personnel when treating exposed employees.

Employees

- Comply with chemical safety requirements of this program.
- Report any problems with storage or use of chemicals.
- Immediately report spills or suspected spills of chemicals.
- Use only those chemicals in the proper manner for specific assigned tasks and for which they have been trained.

Contractors

- Comply with all applicable aspects of this program.
- Coordinate information with the Project Manager or Site Inspector.
- Ensure Contractor employees are properly trained.
- Ensure that MSDS for all chemicals on site is present.
- Notify the Project Manager or Site Inspector before bringing any chemicals into Town property or facilities.
- Monitor and ensure proper storage and use of chemicals by Contractor employees.

General Program Information

This written Hazard Communication Plan (HAZCOM) has been developed based on the CAL-OSHA Hazard Communication Standard and consists of the following elements:

- Identification of Hazardous Materials
- Product Warning Labels
- Material Safety Data Sheets (MSDS)
- Written Hazard Communication Program
- Employee Training

Some chemicals are explosive, corrosive, flammable, or toxic. Other chemicals are relatively safe to use and store but may become dangerous when they interact with other substances. To avoid injury and/or property damage, persons who handle chemicals in any area of the Town must understand the hazardous properties of the chemicals. Before using a specific chemical, safe handling methods and health hazards must always be reviewed. Supervisors are responsible for ensuring that the equipment needed to work safely with chemicals is accessible and maintained for all employees on all shifts.

Employee Training

Initial Orientation Training

All new employees shall receive safety orientation training covering the elements of the HAZCOM and Right to Know Program. This training will consist of general training covering:

- Location and availability of the written Hazard Communication Program.
- Location and availability of the List of Chemicals used in the workplace.
- Methods and observation used to detect the presence or release of a hazardous chemical in the workplace.
- General control measures for protection from physical or health hazards.
- Explanation of the chemical labeling system and how to read and understand an MSDS.

Job Specific Training

Employees will receive on the job training from their supervisor. This training will cover the location of the MSDS binder, chemical safety training for the specific chemicals in their workplace, and how to control hazards, including proper use, inspection, and storage of necessary personal protective equipment.

Annual Refresher Training

Annual Hazard Communication refresher training will be conducted as part of the continuing safety-training program.

Immediate On-the-Spot Training

This training will be conducted by supervisors for any employee that requests additional information or exhibits a lack of understanding of the safety requirements of the Program.

Non-Routine Tasks

Non-routine tasks are defined as working on, near, or with unlabeled piping, unlabeled containers of an unknown substance, confined space entry where a hazardous substance may be present, and/or a one-time task using a hazardous substance differently than intended (example: using a solvent to remove stains from tile floors).

Steps for Non-Routine Tasks

Step 1: Hazard Determination

Step 2: Determine Precautions

Step 3: Specific Training & Documentation

Step 4: Perform Task

The Department Supervisor and, if requested, the designated Safety Coordinator will evaluate all non-routine tasks before the task commences to determine all hazards present. This determination will be conducted with quantitative/qualitative analysis (air sampling, substance identification/analysis, etc., as applicable).

Once the hazard determination is made, the Department Supervisor and, if requested, the designated Safety Coordinator will determine the necessary precautions needed to either remove the hazard, change to a non-hazard, or protect from the hazard (use of personal protective equipment) to safeguard the Employees present. In addition, the Department Supervisor or, if requested, designated Safety Coordinator will provide specific safety training for Employees present or affected and will document the training as "***Non-Routine Task Training.***"

Off-site use or transportation of chemicals

MSDS will be provided to employees for each chemical transported away from the Town facilities. All State and Federal DOT Regulations will be followed including use of certified containers, labeling and marking, securing of containers, and employee training.

General Chemical Safety

Assume all chemicals are hazardous. The number of hazardous chemicals and the number of reactions between them is so large that prior knowledge of all potential hazards cannot be assumed. Use chemicals in as small quantities as possible to minimize exposure and reduce possible harmful effects.

The following general safety rules shall be observed when working with chemicals:

- Read and understand the label and Material Safety Data Sheets (MSDS).
- Keep the work area clean and orderly.
- Use the necessary safety equipment.
- Keep chemicals in the original, manufacture-labeled container whenever possible.
- Carefully label every container with the identity of its contents and appropriate hazard warnings.
- Store incompatible chemicals in separate areas.
- Substitute less toxic materials whenever possible.
- Limit the volume of volatile or flammable material to the minimum needed for short operation periods.
- Provide means of containing the material if equipment or containers should break or spill their contents.

Task Evaluation

Each task that requires the use of chemicals should be evaluated to determine the potential hazards associated with the work. This hazard evaluation must include the chemical or combination of chemicals that will be used in the work, as well as other materials that will be used near the work. If a malfunction during the operation has the potential to cause serious injury or property damage, a Safe Operational Procedure (SOP) should be prepared prior to beginning any work and followed. Operations must be planned to minimize the generation of hazardous wastes.

Chemical Procurement Procedures

Products may be purchased by some departments directly from vendors and retail outlets. When this is necessary, the employee's supervisor should approve the purchase in advance. All purchase orders should be required to provide a current MSDS as a condition of the purchase. The supervisor is responsible for either obtaining MSDS for the product by calling the company listed on the product label or sending sufficient information on the product, including Product Name, Product Number, Manufacturer, and Manufacture Contact information from the label to the Town of Mammoth Lakes designated Safety Coordinator so MSDS can be obtained. It is the Town of Mammoth Lakes' policy to have MSDS on hand before a chemical is used in the workplace. Supervisors are responsible for documenting the reason for using a chemical if a MSDS is not available. In no case will quantities of chemicals greater than or equal to one gallon be used without MSDS on hand.

Chemical Storage

The separation of chemicals (solids, gases, or liquids) during storage is necessary to reduce the possibility of unwanted chemical reactions caused by accidental mixing. Explosives, if any,

should be stored separately outdoors and in the proper container. Use either distance or barriers (e.g., trays) to isolate chemicals into the following groups:

- Flammable Liquids: store in approved flammable storage lockers.
- Acids: quantities greater than one gallon must be stored in approved acid storage lockers separate from flammable liquids and bases.
- Bases: do not store bases with acids or any other material.
- Other liquids: ensure other liquids are not incompatible with any other chemical in the same storage location.
- Lips, strips, or bars are to be installed across the width of storage shelves to restrain the chemicals in case of earthquake.
- Chemicals will not be stored in the same refrigerator used for food storage. A label on the door must appropriately identify refrigerators used for storing chemicals.

Container Labels

It is extremely important that all containers of chemicals are properly labeled. This includes every type of container from a 5000-gallon storage tank to a spray bottle of degreaser. The following requirements apply:

- All containers will have the appropriate label, tag, or marking prominently displayed that identifies the contents, safety procedures, and health hazards.
- Portable containers that contain a small amount of chemical need not be labeled if they are used immediately that shift, but must be under the strict control of the employee using the product.
- All warning labels, tags, etc., must be maintained in a legible condition and not be defaced. Supervisor inspections will check for compliance of this rule weekly.
- Incoming chemicals are to be checked for proper labeling and availability of MSDS.

Emergencies and Spills

In case of an emergency, implement the proper Emergency Action Plan:

1. Evacuate people from the area.
2. Isolate the area.
3. If the material is flammable, turn off ignition and heat sources.
4. Only personnel specifically trained in emergency response are permitted to participate in chemical emergency procedures beyond those required to evacuate the area.
5. Call (911) for the Fire Department HAZMAT Team for proper response, clean up, and disposal

Housekeeping

1. Maintain the smallest possible inventory of chemicals to meet immediate needs.
2. Periodically review stock of chemicals on hand.
3. Ensure that storage areas, or equipment containing large quantities of chemicals, are secure from accidental spills.
4. Rinse emptied bottles that contain acids or flammable solvents before disposal.
5. Recycle unused laboratory chemicals with approved vendors/locations wherever possible.
6. **DO NOT** Place hazardous chemicals in salvage or garbage receptacles.
7. **DO NOT** Pour chemicals onto the ground.
8. **DO NOT** Dispose of chemicals through the storm drain system.
9. **DO NOT** Dispose of highly toxic, malodorous chemicals down sinks or sewer drains.

Contractors

All outside contractors working inside or on Town Facilities are required to follow the requirements of this program. The contracting department will provide Contractors information on:

- Location and availability of Material Safety Data Sheets (MSDS).
- Precautions to be taken to protect contractor employees.
- Potential exposure to hazardous substances.
- Chemicals used in or stored in areas where they will be working.
- Recommended Personal Protective Equipment.
- Labeling system for chemicals.

Definitions

Carcinogen: A cancer causing substance. A substance is considered to be a carcinogen if:

(a) It has been evaluated by the International Agency for Research on Cancer (IARC) Monographs, Vols 1-53 and Supplements 1-8, and found to be a carcinogen or potential carcinogen; or

(b) It is listed as a carcinogen or potential carcinogen in the Sixth Annual Report on Carcinogens published by the National Toxicology Program (NTP); or

(c) It is regulated by OSHA as a carcinogen.

Chemical: Any element, chemical compound, or mixture of elements and/or compounds.

Combustible liquid: Any liquid having a flash point at or above 100 deg. F (37.8 deg. C), but below 200 deg. F (93.3 deg. C), except any mixture having components with flash points of 200 deg. F (93.3 deg. C), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

Compressed gas: Any compound that exhibits:

- (i) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 deg. F.
- (ii) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 deg. F. regardless of the pressure at 70 deg. F.
- (iii) A liquid having a vapor pressure exceeding 40 psi at 100 deg. F.

Container: Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Designated representative: Any individual or organization to which an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

Employee: Every person who is required or directed by any employer, to engage in any employment, or to go to work or be at any time in any place of employment.

Employee Exposure Record: A record containing any of the following kinds of information concerning employee exposure to toxic substances or harmful physical agents:

Workplace monitoring results, biological monitoring results, and either material safety data sheets, or a record, such as a chemical inventory or any other record, which reveals the identity (e.g., chemical, common, or trade name) of a toxic substance or harmful physical agent and where and when the toxic substance or harmful physical agent was used.

Employer: The State and every State agency, each county, town, district, and all public and quasi-public corporations and public agencies therein, every person including any public service corporation, which has any natural person in service, and the legal representative of any deceased employer.

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

Exposure or exposed: Any situation arising from work operation where an employee may ingest, inhale, absorb through the skin or eyes, or otherwise come into contact with a hazardous substance.

Flammable: A chemical that falls into one of the following categories:

- (i) "Aerosol, flammable" means an aerosol that yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening.
- (ii) "Gas, flammable" means: (A) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or (B) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit.
- (iii) "Liquid, flammable" means any liquid having a flash point below 100 deg. F., except any mixture having components with flash points of 100 deg. F. or higher, the total of which make up 99 percent or more of the total volume of the mixture.
- (iv) "Solid, flammable" means a solid, other than a blasting agent or explosive as defined in 1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

Flash point: The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite.

Hazardous substance: Any substance that is a physical hazard or a health hazard or is included in the List of Hazardous Substances prepared by the Director pursuant to Labor Code section 6382.

Hazard warning: Any words, pictures, symbols, or combination appearing on a label or other appropriate form of warning which convey the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s). (See the definitions for "physical hazard" and "health hazard" to determine the hazards which must be covered.)

Health hazard: A chemical for which there is evidence that acute or chronic 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.

Hematopoietic system. Blood, or the system that produces blood in the body.

Hepatotoxins. Substances that produce liver damage.

Histopathology. Tissue changes that affect a part or accompany a disease.

Identity: Any chemical or common name that is indicated on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label, and the MSDS.

Immediate use: The hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Label: Any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

Material safety data sheets (MSDS): Written or printed material concerning a hazardous chemical that is prepared in accordance with OSHA Standard 1910.1200 requirements.

Mixture: Any solution or intimate admixture of two or more substances, at least one of which is present as a hazardous substance, which do not react chemically with each other.

Nephrotoxins. Substances that produce kidney damage.

Neurotoxins. Substances that produce their primary toxic effects on the nervous system.

Oxidizer: A substance other than a blasting agent or explosive as defined in section 5237(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

Physical hazard: A chemical that is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

Pyrophoric: A chemical that will ignite spontaneously in air at a temperature of 130 deg. F. or below.

Specific chemical identity: The chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

Unstable (reactive): A chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shock, pressure, or temperature.

Use: To package, handle, react, emit, extract, generate as a byproduct, or transfer.

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

Work area: A room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Workplace: Any place, and the premises appurtenant thereto, where employment is carried on, except a place the health and safety jurisdiction over which is vested by law in, and actively exercised by, any state or federal agency other than the Division.

MSDS Information

Material Safety Data Sheets are provided by the chemical manufacturer to provide additional information concerning safe use of the product. Each MSDS provides in English:

1. The identity used on the label, and, except for trade secrets, the chemical and common name(s) and CAS number(s).
2. Physical and chemical properties of the hazardous substance (such as vapor pressure, flash point).
3. The physical hazards of the hazardous substance, including the potential for fire, explosion, and reactivity.
4. The health hazards of the hazardous substance, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the substance.
5. The potential route(s) of entry.
6. The OSHA permissible exposure limit or ACGIH Threshold Limit Value.
7. Whether the hazardous substance is listed in the National Toxicology Program (NTP) Sixth Annual Report on Carcinogens or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Vols 1-53 and Supplements 1-8, or by OSHA.
8. Applicable precautions for safe handling and use.
9. Applicable control measures, such as appropriate engineering controls, work practices, or personal protective equipment.
10. Emergency and first-aid procedures.
11. The date of preparation of the material safety data sheet or the last change to it.
12. The name, address, and telephone number of the manufacturer, who can provide additional information on the hazardous substance and appropriate emergency procedures, if necessary.
13. A description in lay terms of the specific potential health risks posed by the hazardous substance intended to alert any person reading the information.

MSDS are considered “Employee Exposure Records” and must be maintained for 30 years, or a record, such as a chemical inventory or any other record, which reveals the identity (e.g., chemical, common, or trade name) of a toxic substance or harmful physical agent and where and when the toxic substance or harmful physical agent was used must be maintained (CCR Title 8, Section 3204 (d)(2)).

Information Chemical Users must know

Fire and/or Explosion Information:

1. Material Flash Point, auto-ignition temperature and upper/lower flammability limits.
2. Proper fire extinguishing agents to be used.
3. Firefighting techniques.
4. Any unusual fire or explosive hazards.

Chemical Reaction Information:

1. Stability of Chemical.
2. Conditions and other materials which can cause reactions with the chemical.
3. Dangerous substances that can be produced when the chemical reacts.

Control Measures:

1. Engineering Controls required for safe product use.
2. Personal protective equipment required for use of product.
3. Safe storage requirements and guidelines.
4. Safe handling procedures.

Health Hazards:

1. Permissible Exposure Limit (PEL) and Threshold Limit Value (TLV).
2. Acute or Chronic symptoms of exposure.
3. Main routes of entry into the body.
4. Medical conditions that can be made worse by exposure.
5. Cancer causing properties, if any.
6. Emergency and First Aid treatments.

Spill & Leak Procedures:

1. Clean up techniques.
2. Personal Protective Equipment to be used during cleanup.
3. Disposal of waste & cleanup material.

Employee Use of MSDS

For MSDS use to be effective, employees must:

1. Know the location of the MSDS.
2. Understand the major points for each chemical.
3. Check MSDS when more information is needed or questions arise.
4. Be able to quickly locate the emergency information on the MSDS.
5. Follow the safety practices provided on the MSDS.

Uniform Labeling System

The following two label systems are used by the Town of Mammoth Lakes.

HMIS Chemical Container Markings

HEALTH HAZARDS

- 4 - Severe
- 3 - Extreme Danger
- 2 - Hazardous

FIRE HAZARDS

- Flash Points
- 4 - Below 73⁰ F
- 3 - Below 100⁰ F

CHEMICAL NAME and NO.		
4 HEALTH		
3 FLAMMABILITY		
1 REACTIVITY		
PERSONAL PROTECTION		
		
For additional hazard information and instructions, consult specific MSDS		

1 - Slightly Hazardous
0 - Normal Material

REACTIVITY

- 4 - May Detonate
- 3 - Shock or heat may cause detonation
- 2 - Violent chemical change
- 1 - Unstable if heated
- 0 - Stable

PERSONAL PROTECTION

Pictures will be placed here of any PPE required. Follow PPE requirements and any other special instructions listed.

NFPA Chemical Container Markings

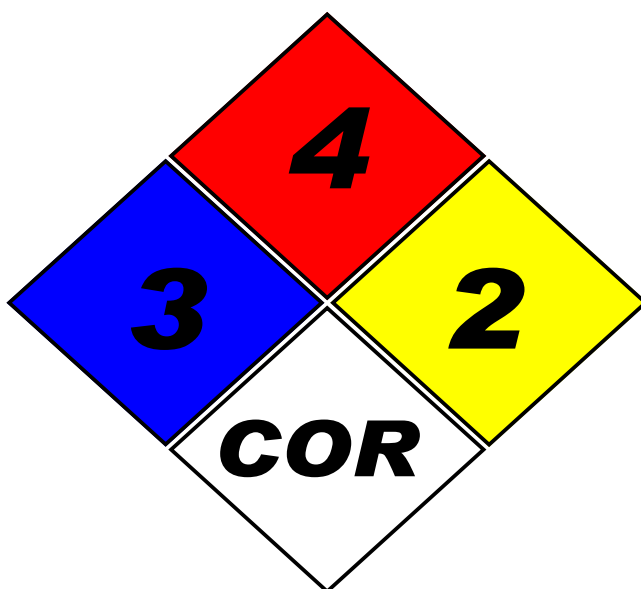
HEALTH HAZARDS

Flash Points

- 4 - Deadly
- 3 - Extreme Danger
- 2 - Hazardous
- 1 - Normal Material

FIRE HAZARDS

- 4 - Below 73⁰ F
- 3 - Below 100⁰ F
- 2 - Above 200⁰ F
- 1 - Will Not Burn



SPECIFIC HAZARD

- OXY - Oxidizer
- ACID - Acid
- ALK - Alkali
- CORR - Corrosive
- W - Use No Water
-  - Radiation Hazard

REACTIVITY

- 4 - May Detonate
- 3 - Shock or heat may cause detonation
- 2 - Violent chemical change
- 1 - Unstable if heated
- 0 - Stable

