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Purpose

This Hazard Communication Program provides detailed safety guidelines and instructions for receipt, use and storage of chemicals at our facility by employees and contractors. A written Hazard Communication Program will be developed, implemented & maintained at each workplace.

Administrative Duties

The Operations Manager has overall responsibility for coordinating safety and health programs in this company. He/she is the person having overall responsibility for the Hazard Communication Program. The Operations Manager will review and update the program, as necessary. Copies of the written program may be obtained in the Operations office.

General Program Information

This written Hazard Communication Plan (HAZCOM) has been developed based on OSHA's 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
- Effective 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 Company 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

Trinity Medical Management will communicate hazard communications to non-English speaking employees by having training and communication materials in the employee's language and/or through the use of an interpreter.

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

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- Any operations in the work area where hazardous chemicals are present.
- Methods and observation used to detect the presence or release of a hazardous chemical in the workplace by use of monitoring devices, visual appearance or odor.
- The specific physical and health hazard of all chemicals in the workplace
- Specific control measures for protection from physical or health hazards, including:
 - Appropriate work practices,
 - Emergency procedures, and/or
 - Proper PPE to be used.
- Details of the Hazard Communication Program
- Explanation of the chemical labeling system and the MSDS and how employees can obtain & use the appropriate hazard information.

Job Specific Training

Employees will receive on the job training from their supervisor. This training will cover the proper use, inspection and storage of necessary personal protective equipment and chemical safety training for the specific chemicals they will be using or will be working around.

Annual Hazard Communication refresher training will be conducted as part of the company's 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.

Trinity will communicate hazard communications to non-English speaking employees by have training and communication materials in the employee's language and/or through the use of an interpreter.

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

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All non-routine tasks will be evaluated by the Area Supervisor and HSE 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 HSE 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 HSE will provide specific safety training for Employees present or affected and will document the training.

Off-Site Use or Transportation of Chemicals

An MSDS will be provided to employees for each chemical and each occurrence of use or transport away from the company facilities. All State and Federal DOT Regulations will be followed including use of certified containers, labeling & 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.

General Safety Rules

- Read and understand the Material Safety Data Sheets.
- Keep the work area clean and orderly.
- Use the necessary safety equipment.
- 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

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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 and followed. Operations must be planned to minimize the generation of hazardous wastes.

Effects on Reproduction

Both men and women may be exposed to hazardous agents that can cause infertility or result in genetic damage that is passed on to offspring. These agents include ionizing radiation, alcohol, cigarette smoke, pharmaceuticals, and some of the thousands of different chemicals that are used in the home or workplace. Although many of these have been tested to determine whether they cause acute (immediate) effects on the body, few have been studied to see if they cause cancer (carcinogens), birth defects (teratogens), or genetic defects (mutagens).

Even fewer have been studied to see if they can cause infertility, menstrual disorders, or other disorders relating to reproduction. The primary path for hazardous substances to reach an unborn child is through the placenta. Scientists now believe that most chemical substances or drugs can cross this barrier with varying degrees of ease and enter the system of the developing fetus. Thus, many chemicals and drugs that enter a pregnant woman's body (through breathing, swallowing, absorption through the skin, etc.) will eventually enter the mother's blood circulation and find their way into the unborn child. In general, the important questions of exactly how much of the toxic substance that enters the mother's body will reach the fetus or what concentration the fetus can tolerate without harmful effects are not yet answered.


The fetus may be most vulnerable in the early weeks of pregnancy, but it is also at risk later in pregnancy. In light of the potential harm of workplace exposures to both a pregnant woman and her developing fetus, it is very important and required by Trinity policy for the woman to inform the Medical Director and / or Operations Manager of her pregnancy immediately.

Airborne Contaminants

Exposures by inhalation of airborne contaminants (gases, vapors, fumes, dusts, and mists) must not exceed the levels listed in the latest edition of Threshold Limit Values of Airborne Contaminants (TLV) published by the American Conference of Governmental Industrial Hygienists. These TLV levels refer to airborne concentrations of substances and represent conditions under which it is believed that workers may be repeatedly exposed without adverse effect. In all cases of potentially harmful exposure, feasible engineering or administrative controls must first be established. In cases where respiratory protective equipment, alone or with other control measures, is required to protect the employee, the protective equipment must be approved by the Training and Compliance Manager (TCM), for each specific use.

Safety Equipment

Eyewash fountains are required if the substance in use presents an eye hazard. The eyewash fountain must provide a soft stream or spray of aerated water. In areas where a corrosive

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chemical or rapid fire hazard exists, safety showers must be provided for immediate first aid treatment of chemical splashes and for extinguishing clothing fires. The shower must be capable of drenching the victim immediately in the event of an emergency. Eyewash fountains and safety showers should be located close to each other so that, if necessary, the eyes can be washed while the body is showered. Access to these facilities must always remain open. In case of accident, flush the affected part for at least 15 minutes. Report the accident to the supervisor immediately. A special first aid treatment kit for fluorine and hydrofluoric acid burns is prepared, and commercially available. The kit must be procured through Operations. Safety shields must be used for protection against possible explosions or splash hazards. Company equipment must be shielded on all sides so that there is no line-of-sight exposure of personnel. The sash on a chemical fume hood is a readily available partial shield. However, a portable shield must also be used, particularly with hoods that have vertical-rising sashes rather than horizontal-sliding sashes.

Chemical Storage

The separation of chemicals (solids or liquids) during storage is necessary to reduce the possibility of unwanted chemical reactions caused by accidental mixing. Explosives should be stored separately outdoors. Use either distance or barriers (e.g., trays) to isolate chemicals into the following groups:

- Flammable Liquids: store in approved flammable storage lockers.
- Acids: treat as flammable liquids
- 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. Refrigerators used for storing chemicals must be appropriately identified by a label on the door.

Disposal of Chemicals

All Trinity employees, participating guests, and visitors using hazardous chemicals are responsible for disposing of these chemicals safely. Federal and state regulations mandate strict disposal procedures for chemicals. To comply with these regulations all persons using Company facilities must observe these procedures. Routine Disposal of Chemicals In general the disposal of hazardous chemicals to the sanitary sewer is not permitted. The Operations Manager will advise on the proper disposal of chemical wastes. In using chemical waste storage containers, certain procedures must be observed, as listed below: Incompatible chemicals must not be mixed in the same container (e.g., acids should not be mixed with bases; organic liquids should not be mixed with strong oxidizing agents). Waste oils must be collected in 55-gallon drums. Disposal solids, and explosive materials must be stored in separate containers.

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The following requirements must be met as a condition for pickup and disposal of chemicals by the responsible party:

- Chemicals must be separated into compatible groups.
- Leaking containers of any sort will not be accepted.
- Dry materials (gloves, wipes, pipettes, etc.) must be securely contained in plastic bags and over packed in a cardboard box.
- Packages that are wet or have sharp protruding objects will not be accepted for pick up.
- Unknown chemicals will require special handling.

The responsible department must make every effort to identify the material that is to be disposed. If all the user's attempts to identify the waste chemicals have failed, HSE will accept the waste and analyze the material. For more information call the Operations Manager.

Each breakable container must be properly boxed. Place all bottles in plastic bags, then place in a sturdy container and use an absorbent cushioning material that is compatible with the chemicals. Each primary container must be labeled with content, amount, physical state, and the percentage breakdown of a mixture. Each box must have a complete list of contents or description written on an official hazardous materials packing list.

Blank packing lists are available from the HSE or Operations. For safety purposes, boxes must be of a size and weight so that one person can handle them. Boxes that exceed 45 pounds or 18 inches on a side cannot be safely handled by one person and will not be acceptable for pick up. General Housekeeping Rules: Maintain the smallest possible inventory of chemicals to meet your immediate needs.


Periodically review your stock of chemicals on hand. Ensure that storage areas, or equipment containing large quantities of chemicals, are secure from accidental spills. Rinse emptied bottles that contain acids or inflammable solvents before disposal. Recycle unused laboratory chemicals wherever possible.

DO NOT place hazardous chemicals in salvage or garbage receptacles. Pour chemicals onto the ground. Dispose of chemicals through the storm drain system. Dispose of highly toxic, malodorous, or lachrymatory chemicals down sinks or sewer drains.

List of Hazardous Materials

The Company has compiled a list of hazardous materials employees may be potentially exposed to. Material Safety Data Sheets for each hazardous material are kept on file. This list is kept with the Material Safety Data Sheets. Consumer products may be exempt from this requirement. Please contact the Operations Manager or HSE for additional information.

Container Labels

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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:

- Container labels should contain the following information: Identity of hazardous chemicals, appropriate hazard warnings and name & address of the chemical manufacturer, importer or other responsible party.
- Employer or employees shall not remove or deface labels on incoming containers of hazardous chemicals.
- Portable containers which 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. Facility weekly supervisor inspections will check for compliance of this rule.
- Incoming chemicals are to be checked for proper labeling.

Hazard Warnings

Methods to address appropriate hazard warnings may include words, pictures, symbols or combinations thereof.

Specific Hazards

- ***The marking in the bottom white square***
- ***OXY - Oxidizer (causes fire through release of oxygen)***
- ***ACID - Acid***
- ***ALK – Alkali***
- ***CORR - Corrosive (both CORR & ALK material create burns on human skin)***
- ***W - Use No Water***
-  - Radiation Hazard

Emergencies and Spills

- In case of an emergency, implement the proper Emergency Action & Response Plan.
- Evacuate people from the area.
- Isolate the area.
- If the material is flammable, turn off ignition and heat sources.
- Only personnel specifically trained in emergency response are permitted to participate in chemical emergency procedures beyond those required to evacuate the area.
- Call for Emergency Response Team assistance if required.

Housekeeping

- Maintain the smallest possible inventory of chemicals to meet immediate needs.

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- Periodically review stock of chemicals on hand.
- Ensure that storage areas, or equipment containing large quantities of chemicals, are secure from accidental spills.
- Rinse emptied bottles that contain acids or inflammable solvents before disposal.
- Recycle unused laboratory chemicals wherever possible.

DO NOT Place hazardous chemicals in salvage or garbage receptacles.

DO NOT Pour chemicals onto the ground.

DO NOT Dispose of chemicals through the storm drain system.

DO NOT Dispose of highly toxic, malodorous chemicals down sinks or sewer drains.

Contractors

All outside contractors working inside Company Facilities are required to follow the requirements of this program. The Company will provide Contractors information concerning:

- Location of 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
- Location and availability of Material Safety Data Sheets
- Recommended Personal Protective Equipment
- Labeling system for chemicals

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:

- Common Name and Chemical Name of the material
- Name, address and phone number of the manufacturer
- Emergency phone numbers for immediate hazard information
- Date the MSDS was last updated
- Listing of hazardous ingredients
- Chemical hazards of the material
- Information for identification of chemical and physical properties

Lay terms for potential health risks will be provided along with the MSDS's.

MSDS shall be maintained and readily accessible in each work area. MSDS can be maintained at the primary work site. However, they should be available in case of an emergency. MSDS must be made available, upon request, to employees, their designated representatives, the Assistant Secretary & the Director. Contact your supervisor to obtain an MSDS on any hazardous chemical in our workplace.

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Information Chemical Users must know

- Fire and/or Explosion Information
- Material Flash Point, auto-ignition temperature and upper/lower flammability limits
- Proper fire extinguishing agents to be used
- Fire fighting techniques
- Any unusual fire or explosive hazards

Chemical Reaction Information

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

Control Measures

- Engineering Controls required for safe product use
- Personal protective equipment required for use of product
- Safe storage requirements and guidelines
- Safe handling procedures

Health Hazards

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

Spill & Leak Procedures

Clean Up Techniques

Personal Protective Equipment to be Used During Cleanup

Disposal of Waste & Cleanup Material

Employee Use of MSDS

For MSDS use to be effective, employees must:

- Know the location of the MSDS
- Understand the major points for each chemical

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- Check MSDS when more information is needed or questions arise
- Be able to quickly locate the emergency information on the MSDS
- Follow the safety practices provided on the MSDS

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 employees or their designated representative
- Shipping & Receiving Manager
- Ensure all received containers are properly labeled and that labels are not removed or defaced
- Ensure all shipped containers are properly labeled
- Ensure shipping department employees are properly trained in spill response
- Ensure received Material Safety Data Sheets (MSDS) are properly distributed

HSE


- Maintain a list of hazardous chemicals using the identity that is referenced on the MSDS
- 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
- Monitor facility for proper use, storage and labeling of chemicals
- Ensure MSDS are available for emergency medical personnel when treating exposed employees
- Provide information, as requested, concerning health effects and exposure symptoms listed on MSDSs

Supervisors

- Comply with all specific requirements of the program
- Provide specific chemical safety training for assigned employees
- Ensure chemicals are properly used stored & labeled
- Ensure only the minimum amount necessary is kept at work stations
- Ensure up to date MSDS are readily accessible to all employees on all shifts

Employees

- Comply with chemical safety requirements of this program

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- Report any problems with storage or use of chemicals
- Immediately report spills of suspected spills of chemicals
- Use only those chemicals for which they have been trained
- Use chemicals only for specific assigned tasks in the proper manner

Contractors

- Comply with all aspects of this program
- Coordinate information with HSE
- Ensure Contractor employees are properly trained
- Notify HSE before bringing any chemicals into company property or facilities
- Monitor and ensure proper storage and use of chemicals by Contractor employees

Multi-Employer Workplace

HSE is responsible for informing Contractors and Sub-Contractors of hazardous substances to which they or their employees may be exposed while performing their work. The HSE Tech will provide all necessary MSDS and information on our hazardous material labeling system. This information will be provided to the contractor during the pre-construction meeting.

The HSE Tech is also responsible for obtaining a list of MSDS for any hazardous substance that a Contractor is bringing on to a work-site. This information shall be provided to the Project Director/Site Coordinator prior to initiation of the Contract.

The program will be made available, upon request, to employees, their designated representatives, the Assistant Secretary & the Director. Where employees must travel between work places during a work shift (multi job sites), the written program maybe kept at a primary job site. If there is no primary, then the program should be sent with employees.

Attachments

HSE-BF-009 Hazard Communication List of Hazardous Substances
HSE-BF-010 Request for Material Safety Data Sheet