

Hampton Tedder Electric Co.

Hazard Communication & Chemical Spill Response

A. PURPOSE

Hampton Tedder Electric Co. Hazard Communication Program is an integral part of our employee safety and health awareness program. We have also adopted additional chemical hazard control programs to ensure our compliance with the different hazardous material regulations which incorporate the elements of the Hazard Communication program.

The purpose of the Hazard Communication program is to ensure that all of our employees have had adequate training about the hazardous substances they use and the control of those hazards, before they use the products. This is accomplished through employee training on container labeling, Safety Data Sheets * (SDS) and the written Hazard Communication program. The goal of the program is to eliminate the possibility of illnesses and injuries caused by exposure to chemicals.

* **NOTE** – Our Haz-Com program now uses terminology consistent with the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals. By 2016, this system will replace MSDS with Safety Data Sheets (SDS) and new labeling formats which use Signal Words, Hazard and Precautionary Statements and graphic hazard identifiers called pictograms. During the transition period, employees will begin to see both methods of hazard communication in the workplace.

Our written program, which includes SDS, will be available at the main office, jobsite trailer or office. Other contractors at the jobsite have submitted their individual Hazard Communication programs and SDS to the general contractor. These are also available for your review during normal working hours.

All Hazard Communication programs and notification of how to review an SDS are available to any employee on site, the general contractor, or any OSHA compliance staff during an inspection.

B. THE HAZARD COMMUNICATION PROGRAM AND SPILL RESPONSE

This document covers the required OSHA Hazard Communication written plan and reviews basic spill response procedures for hazardous materials. Basic Hazardous Materials Spill response procedures are provided at the end of this program.

C. KEY DEFINITIONS

1. **Hazardous Chemical:** Any chemical which is a physical hazard or a health hazard (potential injury or disease agent)
2. **Hazard warning (label)** Any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning to convey the hazards of the chemical in the container.
3. **Safety Data Sheet:** Written or printed material concerning a hazardous chemical which is prepared in accordance with OAR Division 2 - 1910.1200.

D. GENERAL RESPONSIBILITIES AND TRAINING

1. **The Project Manager & Foreman** have overall responsibility to see that hazardous materials at the site are handled safely and that employees are trained in the physical and health hazards associated with the chemicals.
2. **Foreman or Site Supervisors** are responsible to that the program is implemented and maintained which covers the Hazard Communication requirements. They work together to ensure employee training, appropriate container labeling, availability of the SDS, maintenance of the chemical inventory, and information is provided to project manager.
3. The site supervisors are responsible to get a SDS for each new product with hazardous chemical brought onto the jobsite, advising employees of the location of SDSs, review the physical and health hazards of materials introduced into the work area and updating employee information and training. They are also responsible to see that secondary containers are labeled.
4. **Central office staff** are responsible for maintaining the overall SDS system and ensuring that our written program and training materials are current and reflect the needs at the jobsites.
5. **Purchasing staff** will ensure that new hazardous chemicals have received prior approval from the Safety Officer/Environmental Specialist and that a SDS has been received.
6. **All Employees** are responsible to read the labels and SDS for products they use. Attend the hazard communication training and properly handle chemicals per the labels, SDS and training. Employees generating secondary containers are responsible to label the containers or see that they are using properly labeled container

E. BASIC REQUIREMENTS

1. Chemical Inventory

- a. An up to date inventory or list of chemicals and hazardous substances will be maintained at each site in the job trailer or office where these materials are used or stored.
- b. The master Chemical Product Inventory list will be kept at the main office with all current product SDS sheets.

2. Hazard Evaluation

- a. Periodically, the foreman, safety committee, or both will conduct periodic evaluations of the methods used on a jobsite to control hazardous substances and chemicals.
- b. The following points should be covered as part of the evaluation:
 1. Hazard class (flammable, combustible, explosive, corrosive, etc.)
 2. Compatibility of chemicals in storage
 3. Secondary Containment (catch trays under barrels)
 4. Labeling
 5. First aid equipment such as deluge eye wash stations.
 6. Spill clean up supplies
 7. Fire protection
 8. Grounding and bonding
 9. Protective clothing and equipment.

F. LABELING

1. PRIMARY CONTAINER LABELING: Container as received.

- a. OSHA requires that all chemical manufacturers, importers, and distributors properly label all shipments of hazardous chemicals with:
 - product identifier and signal words (Danger or Warning)
 - hazard and precautionary statements
 - pictograms and manufacturer or importer contact information
- b. No container of hazardous chemicals will be released for use until the label information is verified by site staff.
- c. All employees are to be aware that the label must be maintained on the chemical container and will notify their supervisor or environmental services representatives if any unlabeled container(s) are discovered in their work area.

2. SECONDARY CONTAINER LABELING: Containers that hold transferred hazardous materials from the original to a secondary use container are required to be labeled.

- a. The employee in charge of the transfer must ensure that a hazard warning label is placed on the container. Portable containers which only one employee uses and is transferring chemical to be completely used during his or her shift (immediate use) are not required to be labeled. But if more than one employee uses the containers or material is stored over to the next shifts it must be labeled.
- b. The hazard warnings must be legible, in English and prominently displayed. This includes labeling the product name and hazard warning. If a label becomes torn or not legible it must be relabelled by the employee using the product or the designated person.

G. Safety Data Sheet (SDS)

1. Chemical manufacturers and importers are required by OSHA to develop a standardized, 16 section, SDS for each hazardous chemical product. These contain detailed information about the health and physical hazards associated with the product. It is the responsibility of the individual ordering the chemical to ensure that we receive an SDS with the shipment of new chemicals or provide the SDS where there has been a change. To ensure that we receive the SDS our purchasing department has the following notification added to all chemical purchase orders:

"Safety Data Sheets will be sent to Safety Coordinator for each new chemical product purchase and updated SDS will be sent when the manufacturers or importer changes the SDS."

2. If SDS are not given to Receiving, they will notify the individual who ordered the chemical and the product will not be released for use until the SDS is available.
3. When SDS are received by Purchasing, or the User, they are to be forwarded to the Safety Officer who will see that they are entered into the system and copies are sent to the appropriate user.
4. Copies of SDS for all hazardous chemicals are kept in a master files and maintained by the Safety Officer.
5. SDS for products no longer in use will be maintenance in the Central Office.
6. SDS are available to our employees for review during each work shift. If SDS are not available, or new chemicals in use do not have SDS, immediately contact your supervisor.
7. A list of Hazardous Chemicals will be kept as part of the SDS index - table of contents. The lists (index) will be updated as new chemicals are purchased. The Safety Officer or designated staff is responsible to maintain the current inventory list of chemicals.

H. Employee Training and Information

1. A key component of this program is training employees about the hazardous chemicals they come in contact with. Our training program is done in two parts.
 - a. The initial orientation is done by the Foreman. The elements of training covered in the initial orientation includes:
 1. An overview of the Hazard Communication Rule requirements
 2. Location and access of our written hazard communication program and SDS.
 3. How to read labels and review SDS to obtain hazard information.
 - b. The foreman and supervisor will review with the employee the specific chemicals, hazards and precautions needed in the employee's work area. The training program will cover the following elements:
 1. Review of the chemicals present in their workplace.
 2. Physical and health effects of the hazardous chemicals.
 3. Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area.
 4. How to lessen or prevent exposure to these hazardous chemicals through usage of control/work practices and personal protective equipment.
 5. Safety emergency procedures to follow if our employees are exposed to these chemicals.
2. It is critically important that all of our employees understand the training. If you have any additional questions please contact your supervisor. Each employee will fill-out a training verification form which asks the employee that he or she understands the training.
3. When new chemicals are introduced, the Foreman and Supervisor will review the above items as they are related to the employees work areas.

I. Hazardous Non-Routine Tasks

1. Periodically, employees are required to perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee shall review information about hazards to which they may be exposed during such an activity. This shall be the responsibility of the Foreman and Supervisor.
2. The training information will include:
 - a. Specific chemical hazards.
 - b. Protective/safety measures which must be utilized.
 - c. Measures the Department has taken to lessen the hazards including ventilation, respirators, presence of another employees and emergency procedures.
 - d. The SDS will be available for employees to review.

J. Hazards of Chemicals in Piping Systems

1. At various jobsites, there may be piping systems that carry hazardous materials. All piping systems shall be labeled per OSHA required identifiers. Specific hazard warning labels are not provided as a result, your foreman or supervisor will review any hazards associated with chemicals in piping systems in your work area.
2. All hazardous materials carried in piping systems are required to be labeled under OAR 437-002-0378 " Oregon Rules for Pipe Labeling".

"Pipes and piping systems which contain hazardous substances (any health or physical hazardous agent) or transport substances in hazardous state shall be labeled..."

3. The labels must be lettered labels. The label shall give the name of the contents in full or abbreviated form. The labels may be posted in the area of the pipe/piping systems. The labeling shall be applied at a minimum at the beginning and end of continuous pipe runs. A complete hazard label is not required on pipes.

K. General Spill Response Safety Procedures

The following procedures have been developed for handling small spills by competent employees in the immediate work areas. For major hazardous materials releases our procedures are to evacuate and call in our trained Emergency Response Team.

The purpose of this section is to review basic spill response responsibilities as they relate to small spills (less than 5 to 10 gallons) of low toxicity materials by the immediate employees. This material outlines our procedures and is part of our overall Hazard Communication Training Program.

1. Procedures For A Small Manageable Spill - Hazardous Material Spill/Release Control

- a. Employees who handle potentially hazardous chemicals that can spill must know how to use techniques to minimize or prevent harm to life, environment, or property.
- b. Goal of Spill Control
 1. To prevent harm to life
 2. To prevent harm to the environment
 3. Prevent lost of property and equipment

2. Objectives - RESPONSE PROCEDURES

- a. Response procedures will be developed to effectively and efficiently control the hazardous material incident and to minimize or prevent damage to life, the environment or property.
- b. Hazardous material incidents can happen any time. Pre-planning on how to properly handle an incident along with knowledge and use of appropriate control methods will lessen the negative impact from the hazardous material.

3. BASIC RESPONSE PROCEDURES always include:

- a. Identification of the material and its associated hazards
- b. Use of correct PPE and clean up equipment
- c. Stopping the flow or confining/containing the spilled material if the spill is small and employees are trained to handle the chemical safely.

4. CONTROL METHODS include containment and confinement:

- a. **Employees are not trained to respond to large or highly toxic material spills. We do NOT have a trained Emergency Response team.**
- b. **Containment** means controlling the flow at its source by either preventing additional releases or stopping it at the original container. The use of PLUGS, PATCHES OR OTHER MATERIAL are containment methods to stop releases. We will only contain small spills of hazard materials. Large hazardous spills will be contained by OUTSIDE Hazmat teams.
- c. **Confinement** is any action employed to control where a spilled hazardous material is going. Confinement methods vary with the state of the substance when release from its container: solid, liquid, or gas.
- d. The following are various **containment methods** available, your supervisor, will review the procedures for the specific materials you are handling and the location of spill confinement and containment materials.

1. Solids Materials

- Containerizing confines the spilled material by placing the hazardous material or the damaged original container in a larger, intact container.
- Covering a hazardous material with plastic sheeting or a tarp. Make sure the cover used on the solid material is compatible with the chemical.
- It is important not to spread the material in such a way as to have it enter the environment such as water spray material that is soluble and enters the ground.

2. Liquids: major hazardous materials are the liquid solvents acids and bases which can represent health hazards, fire hazards, and environmental contamination hazards.

- **Retaining** liquids that are leaking slowly from an elevated source such as from a pipe or tank in a bucket or basin should confine the material until help arrives.
- **Diking** around the liquid spill will help direct the flow and contain the hazardous material. The use of "PIGS" can assist in the containment and absorption of the spill

- Dikes can be commercially purchased as “pigs” or built of clay, soil materials, sand.
- Avoid digging holes or trenches in the path of the liquid to contain or direct it. This tends to increase the rate of soil permeation and ground water contamination.
- **Cover all open floor drains** or street storm drains with either plastic sheeting or chemically resistant material or divert the flow of the spilled material. This can be done by building dikes and isolating the liquid flow in a particular area as an interim method.
- **Absorbing** utilizes a solid (sorberent) that is capable of retaining a volume of liquid several times its own weight or mass. If sorbents are used, they must be compatible with the spilled material. The sorbents will then be properly disposed of as a hazardous waste. The contaminated sorberent materials will generally be classified as a hazardous waste and will have to be properly disposed of. The Safety Officer will determine the status and disposal methods for the material.
- Both commercial spill kits with sorberent material are available as well as bulk materials of clay, sand and other absorbents in the raw materials warehouse. The use of the bulk materials will be directed by the Safety Officer.
- **Covering a spilled liquid** with sheeting or chemically resistant cloth will decrease the evaporation or vaporizing of the hazardous material. The cover material must be compatible with the chemical before applying it.

3. Gases & Vapors: Gases and vapors tend to engulf an area in all directions at once. If an accidental release occurs stop the release if you are properly trained and can do so safely. Provide ventilation, evacuate the area if necessary. Contact the Project Management and call 911 if the leak is beyond our safe control.

4. Response to Spills and Releases of Hazardous Materials - Basic Procedures for employees trained to clean up small spills for the chemical products they routinely use:

a. *Small Containers not more than One Gallon*

- i. **Basic Equipment:** Gloves, goggles, absorbents/pigs, respiratory protection, plastic bag and/or bucket
- ii. **Precautions:** Avoid liquid contact with skin, eyes & clothing, avoid inhalation of vapors or mists
- iii. **Procedure:**
 1. Clear immediate area
 2. Put on safety equipment
 3. Identify spilled material
 4. Contain spread of spill with pigs
 5. Absorb spilled material with chemicals towels, absorbent material
 6. Collect and seal saturated towels in plastic bag, label the contents and notify the Project Manager, Supervisor, or Environmental Specialist immediately.
 7. Place all protective equipment in a plastic bag for disposal
 8. Contact the Supervisor or Environmental Specialist for any additional clean-up requirements and safe disposal of equipment and waste.

b. *CONTROLLING LEAKS IN DRUMS*

1. Gravity dictates that a hazardous material will follow the path of least resistance. A logical approach to controlling minor leaks in any drum is to raise the hole above the level of the liquid or solid. This can be done quickly by rolling a drum so the hole is on top or by standing the drum on end.
2. Minor leaks can occur at normal openings such as the bung or lid. These leaks are stopped by tightening the bung clockwise. If a bung wrench is unavailable, along-handled screwdriver can be used. Drum rim clamps can be tightened with pliers and screwdrivers if the clamp is placed properly over the rim of the drum.
3. Drum Punctures: CALL FOR EMERGENCY ASSISTANCE.

c. CONTROLLING PIPE OR VALVE LEAKS OR RELEASE

1. If it is a slow leak a commercial pipe repair kit is available and may be used to apply to the pipe line until the line can be safely drained. The feed to the line needs to be turned off and lock-out/tagout procedures need to be applied.
2. For a valve failure the main source needs to be shut off. If this is the main valve special instructions from maintenance are needed with the first responders shutting off feed valves, diking the area to prevent spread and calling main office
3. Clean-up using absorbents and proper disposal are required to be followed. Additional procedures depend on the type of material spilling.

5. Summary - Control Procedures

Focus on controlling the spill/leak at the source. If you are not trained or can't stop the leak with available resources and common sense, then at least confine the spilled material, secure the scene, and call for emergency help.

6 . Termination Procedures activities involve:

- a. Interim termination by the first responders once it is seen that the incident requires additional protection and training greater than the first responders have,
- b. Once the entire incident has been controlled and clean up procedures are finished allowing the area to be safely entered for routine operations.
- c. Proper termination activities also involve the review and critique of the emergency response procedures and outcomes.

7. Training Requirements

- a. The level of training required depends on the extend of the hazard of the spill or release. Hazardous releases require specially trained and equipped persons required to handle the emergency. There are five levels of training in addition to Hazard Communication training. Hampton Tedder will also ensure we meet Department of Transportation and Department of Environmental Quality hazardous materials training.
- b. The following basic training is required of our employees and will be provided by their supervisors or through other training sources arranged by the supervisors.

1. *ALL EMPLOYEES - Hazard Communication, including GHS elements*, as initial training and whenever there is a change in chemicals in use that result in change in the level of hazard. This includes basic spill and release response including review of the Emergency Action plan as it applies to chemicals in use. Our employees are trained under the Hazard Communication Standard and based on general hazard awareness.

2. *EMPLOYEES HANDLING HAZARDOUS WASTES*: These employees must be trained in our Hazardous Waste Contingency Plans and trained how to respond. This is the responsibility of the Safety Officer.

L. PCBs Spill Response and Clean-up. While PCBs are no longer commonly found and would not be used in any new installations our employees may be involved in renovations which includes old ballast, transformers and capacity that contain PCBs.

1. Project Managers would need specific action plans if there is exposure to PCBs during work at hazardous waste sites and during emergency response/ cleanup of non-incidentals spills should be addressed by the applicable sections of 1910.120, Hazardous Waste Operations and Emergency Response.
2. PCB's are covered by the Hazard Communication Standard 1910.1200. Our supervisors will review hazards with employees if PCB containing materials are handled, or likely to be handled.
3. Potential skin contact hazards with all PCBs will be controlled with the proper personal protective equipment.
4. Supervision will make sure that no eating or food storage is done in areas with PCB contamination
5. Additional controls at job sites with PCB contamination may include:
 - Poor personal hygiene practices including shower facilities.
 - Proper clean-up materials
 - Specific written plan of action
 - Proper personal protective equipment.