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OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)	

PURPOSE

The purpose of this program is to provide the framework for an effective hazard communication program. Implementation of this program allows for information pertaining to chemical hazards and protective measures associated with Energy Supply to be communicated to all employees and contractors.

INTRODUCTION

TAMPA ELECTRIC is dedicated to providing a safe and healthful workplace for its employees by communicating information concerning chemical hazards and appropriate protective measures to all affected employees and contractors.

This program contains the following elements:

- The development, availability and implementation of employee training programs regarding chemical hazards and protective measures;
- A process for the evaluation of new chemicals and products introduced into the workplace;
- The availability and means for providing lists of hazardous chemicals present in the workplace;
- The availability and distribution of Safety Data Sheets (SDS) to employees;
- Labeling requirements of chemical containers and other forms of warning in the workplace;
- Methods for employees to be informed of hazards associated with non-routine tasks and hazards associated with chemicals in their work areas;
- Periodic program evaluations;

RESPONSIBILITIES

Each Director is responsible for the implementation and maintenance of the Hazard Communication Program at their facility. The Manager, Laboratory Services is responsible for the implementation and maintenance of the Hazard Communication Program at the Causeway facility.

The Joint Departmental Committee (JDC) Safety Programs is responsible for reviewing, maintaining, and revising this program, as necessary. Responsibilities supporting this objective may be assigned to others as designated.

All Personnel (employees, contractors, and visitors) are responsible for following the requirements of this program and for working with chemicals and materials in accordance with the safety guidance provided in each SDS.

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EMPLOYEE TRAINING

Target Audience – All employees of Tampa Electric, Energy Supply.

Frequency – Refresher training shall be performed every 3 years, or as required by your performance coach.

Methods – Training shall be accomplished through Computer-Based Training (CBT) or classroom training, by PowerPoint presentation with video, or other training materials determined adequate by the Safety Department.

At a minimum, the content of the training shall include:

- Information on the requirements of 29 CFR 1910.1200(h), any operations in their work area where hazardous chemicals are present, and the location/availability of the written hazard communication program to include the location of the list of hazardous chemicals and Safety Data Sheets (SDS).
- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area.
- The physical and health hazards of the chemicals in the work area.
- The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
- The details of the hazard communication program developed by the employer, including an explanation of the labeling system and the safety data sheet, and how employees can obtain and use the appropriate hazard information.

Documentation – All training will be documented electronically in Cority. Classroom training will require the attendees to sign a roster and that information will later be transferred into Cority. When Computer Based Training is used, the training may be documented in the separate CBT program database and transferred into Cority.

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CHEMICAL INVENTORY AND SAFETY DATA SHEETS (SDS)

An online database through the MSDS Online Company provides access to current hazardous material inventories and associated SDS's for Emera and Tampa Electric Energy Supply. The link for the SDS inventory can be found on the World Class Safety Site on the left side of the page. This internet access offers immediate viewing and printing of any SDS from Emera's inventory and assists in compliance with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

REVIEW / APPROVAL OF NEW CHEMICALS / MATERIALS

The term "new chemical" refers to any product, chemical substance or mixture that is not listed in the location's MSDS Online inventory.

It applies not only to chemicals for use in generation processes but also to such other substances such as laboratory reagents, water and boiler treatment chemicals, solvents, chemical sprays, coating for equipment, stenciling inks, degreasing materials, cleaning materials, and to any similar product. This includes products which are being brought in on a "trial" or "sample" basis, as well as products, chemicals and materials brought in by contractors.

Any person, except for item 3, requesting to bring a product into any Energy Supply location shall:

- Obtain the most recent revision of Safety Data Sheet (SDS) from the supplier of the new product.
- 2. Complete the <u>New Chemical Evaluation Request Form</u> (Appendix B). The requestor is responsible for identifying all usage information.
- 3. Contractors and Non-Energy Supply Tampa Electric employees that are bringing products on-location for their exclusive use are not required to complete the New Chemical Evaluation Request Form. However, they are required to submit a copy of the SDS(s) to the Station Environmental Coordinator and the Station Safety Professional prior to bringing the product on site.
- 4. At the power stations, forward copies of the SDS and completed form to the respective Station Environmental Coordinator and the Station Safety Professional, for review and approval. Approval must be obtained by both the Environmental Coordinator and Safety Professional for the product to be brought on-site.
- At the Causeway Laboratory, forward copies of the SDS and completed form to the Environmental Specialist and/or Coordinator at Causeway who can work with a member of the Tampa Electric Safety Department to review and approve. The Manager,

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Laboratory Services will complete the section of the form "Environmental Coordinator Approval".

- 6. The Station Safety Professional and Environmental Coordinator will determine if the Area Manager's review and approval is required.
 - a. The Station Environmental Coordinator will forward copies of the SDS and completed requests generated by the stations to the Administrator, Land and Water Programs. The Manager, Laboratory Services will forward copies of the SDS and completed requests generated by the Causeway Laboratory to the Administrator Land and Water Programs.
- 7. These individuals will review available data on the chemical, to include the following:
 - a. Unusual safety and health hazards
 - b. Fire and explosion hazards
 - c. Reactivity
 - d. Special handling precautions
 - e. Protective equipment and clothing required
 - f. Disposal requirements
 - g. Operating and use procedures
 - h. Potential Environmental Impact
- 8. Determination will be made by the reviewing parties whether the new product may be used. Approval and special handling guidance will be provided to the requestor by the Station Environmental Coordinator or the Station Safety Professional. Determination will be made during the review process whether additional training is required for employees who may be handling the material. This training will be conducted and any additional PPE that is required will be acquired by the requestor prior to the product being brought on site.
- 9. The reason for not approving a product shall be communicated to all parties in the review chain including the requestor.
- 10. If approved, the location Safety Professional or Manager, Laboratory Services will ensure the chemical is added to the database inventory.

DEVELOPMENT OF SDSs FOR BY-PRODUCTS

OSHA requires chemical manufacturers to obtain or develop a safety data sheet for each chemical they produce. In instances where Tampa Electric Company generates by-products that are sold or used by locations external to the by-product generating facility, Tampa Electric Company is considered a "Chemical Manufacturer".

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The employee(s) responsible for working with, handling and shipping will be responsible for ensuring that an SDS is produced and available for each by-product as required, prior to it leaving the generating facility. The Station Safety Professional and Station Environmental Coordinator can support the creation and review of SDS's, as needed.

MATERIAL LABELING

The receiving department (stores) will verify that all containers received for use are clearly labeled as to the contents, appropriate hazard warning and list the name and address of the manufacturer. They will also verify that an SDS is available for each product.

Each employee will verify that all containers that they use are labeled with the identity of the contents and the appropriate hazard warning. For help with labeling, see the Station Safety Professional.

Individual stationary process containers and associated piping will be placarded or labeled with the identity of the contents and appropriate hazard warnings. The station may choose to use the National Fire Protection Association (NFPA) hazard warning labels, DOT hazardous material placards or other words, pictures, symbols, or combination thereof to provide the necessary hazard information. The station may alternatively use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers and equipment. If the alternative methods are utilized, it should clearly identify the applicable containers and associated equipment and identity of the contents and appropriate hazard warnings.

FACILITY WARNING SYSTEMS

During a fire, chemical release or other emergency event, audible emergency signals are used to communicate the evacuation or shelter in place commands to the employees throughout the facility. These signals are tested on Wednesday at 12:30 pm to ensure the system is operating correctly. Employees and contractors are oriented annually in the recognition of and response to the tones.

PERIODIC PROGRAM EVALUATION

The JDC Safety Programs is responsible for periodically performing evaluations of the elements outlined in this document so that the effectiveness of the program may be maintained. Responsibilities supporting this objective may be assigned to others as designated.

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APPENDIX A -GLOSSARY

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Chemical - any element, chemical compound, or mixture of elements and/or compounds.

Chemical manufacturer - an employer with a workplace where chemical(s) are produced for use or distribution.

Combustible liquid - any liquid having a flashpoint at or above 100 °F (37.8 °C), but below 200 °F (93.3 °C), except any mixture having components with flashpoints of 200 °F (93.3 °C), or higher, the total volume of which make up 99% or more of the total volume of the mixture.

Compressed gas -

- (i) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 °F (21.1 °C); or
- (ii) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 °F (54.4 °C) regardless of the pressure at 70 °F (21.1 °C); or
- (iii) A liquid having a vapor pressure exceeding 40 psi at 100 °F (37.8 °C) as determined by ASTM D-323-72.

Container - any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of 29 CFR 1910.1200, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Distributor - a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

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 - an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g. accidental or possible) exposure. "Subjected" in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

Flammable - a chemical that falls into one of the following categories:

- (i) "Aerosol, flammable" -an aerosol that, when tested by the method described in 16 CFR 1500.45, 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":
 - (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

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- (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"-any liquid having a flashpoint below 100 °F (37.8 °C), except any mixture having components with flashpoints of 100 °F (37.8 °C) or higher, the total of which make up 99% or more of the total volume of the mixture.
- (iv) "Solid, flammable"-a solid, other than a blasting agent or explosive as defined in 29 CFR 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, when tested by the method described in 16 CFR 1500.44, 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.

Flashpoint - the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested.

Hazardous chemical - any chemical which is a physical hazard or a health hazard.

Hazard warning - words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the specific physical and health hazard(s).

Health hazard - includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, and agents which damage the lungs, skin, eyes, or mucous membranes.

Immediate use - that 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.

Safety Data Sheet (SDS) - written material describing a chemical which is prepared in accordance with 29 CFR 1910.1200(g).

Mixture - any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

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National Fire Protection Association (NFPA) - The world's leading advocate of fire prevention and an authoritative source on public safety. NFPA develops, publishes, and disseminates more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks.

Physical hazard - a chemical that it is a combustible liquid, a compressed gas, explosive, flammable, an oxidizer, unstable (reactive) or water-reactive.

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APPENDIX B - SAMPLE NEW CHEMICAL EVALUATION REQUEST

I ECO.		MPA ELECTRIC - Energy Supply v Chemical Evaluation Request			TE	TEC Stock Number:		
*** This form is to be completed by the chemical / product requestor. ***								
Chemical / Product Information:								
Manufacturer Product Mame & NSN:								
Manufacture's/Supplier's Name:				Manufacture's/Supplier's Phone:				
Manufacture's/Supplier's Address:								
Usage Information:								
Exact location of where the product will be used:								
Who will be using product?								
Specific application and procedure for product's use:								
Type of area product used:	co	on fined space		Indo	ors] [Outdoors	
Is this product replacing an existing product?	an							
PPE Requirements:	List available TEC Stock Number(s):							
TEC Stock Items? 🔲 Y								
N	List additions	List additional PPE Required:						
	Has addition	Has additional PPE been ordered? ☐ Y						
Exposure Assessment:								
Affected Personnel Training Requirements:								
Storage Information:								
Estimated maximum amount of product onsite at any given time:				Container Size:		Container Type:		
How will this be stored?								
Requester Information:								
Requestor Signature:						Date	:	
Name (print). Phone:								
o cation: Department:								
Approval: (Provide reasons for disapproval on reverse side of form. Notify all previous approver's and requestor of disapproval.)								
Environmental Coordinator Safety Coordinator Area Manager (optional) Y: N:: Initials: Y: N:: Y: N:: Initials: Y: N:: Initials								
Attach the Safety Data Sheet (SDS) and any other product information								

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