

WORKING WITH HAZARDOUS SUBSTANCES

Work description: Working with Hazardous Substances

Scope: All work involving the purchasing, storage, use, and disposal of hazardous substances

References:

- U.S. Occupational Safety and Health Administration (OSHA) Occupational Safety and Health Standards for General Industry contained in Title 29 of the Code of Federal Regulations Part 1910 (29 CFR 1910) (§1910 Subpart Z / 1910.1030 / 1910.1200)
- State of Hawaii – Development Occupational Safety and Health Section (HIOSH) – Hawaii Administrative Rules Title 12, Department of Labor and Industrial Relations Subtitle 8, Hawaii Occupational Safety and Health Division Part 2, General Industry Standards Chapter 60 (§12-60-2(b) Safety and health programs.)

PPE and precautions	Competencies or qualifications	Licenses or permits required
Task PPE - As per Task Risk Assessment Hazardous Substance PPE – as per SDS	Hazardous Substance Training	As per SDS
Tools and equipment required		
Task Tools and Equipment - As per Task Instruction; Hazardous Substance Tools and Equipment – As per SDS		


Note

Activities performed by HRH may result in potential employee exposures to chemical agents, physical agents, and hazardous environments. It is our policy that employee exposures be reduced to concentrations or levels that are as low as reasonably achievable. To achieve this policy, HRH implements controls such as engineering controls, administrative controls and work practices, and/or personal protective equipment (PPE) to reduce employee exposures below acceptable limits. To determine acceptable limits for hazardous substance exposure, HRH references values published in the most recent American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values and Biological Exposure Indices, OSHA.

Hazardous Substance Risk Management

Hazard Evaluation	<ul style="list-style-type: none"> • Hazardous Substance Assessments shall be undertaken on all hazardous substances used in HRH Processes and Procedures, these shall be recorded on HNL-09651 Hazardous Substance Assessment. • Only substances recorded in the HNL-09650 Approved Substances Register are permitted to be used. • During the planning stages of all tasks, HRH shall evaluate operations, materials, and equipment to determine if there is a potential presence of any chemical agents, physical agents, and/or hazardous atmospheres. • Employees also perform continuing hazard evaluations during the performance of activities to verify the adequacy of hazard control measures and to detect changes in area conditions that could require additional control measures. On-site hazard evaluations may include the use of integrated monitoring methods or direct reading instrumentation to evaluate potential hazards. The following guidelines shall be implemented when on-site hazard evaluations are performed. • Approved and calibrated testing devices shall be provided to measure chemical agents, physical agents, and hazardous environments and indicated in the AHAs. Measurements shall be made as frequently as necessary to ensure the continued protection of personnel in the area. • Individuals performing testing and monitoring shall be trained in testing and monitoring procedures and hazards. • Testing and monitoring devices shall be used, inspected, calibrated, and maintained in accordance with the manufacturer's instructions and/or standard industrial hygiene practice. A copy of the manufacturer's instrument operating manual shall be maintained at the project site for each testing and monitoring device in use. • Integrated air samples collected for evaluating potential employee exposures to airborne chemical contaminants shall be collected and analyzed following the guidelines and requirements of NIOSH or OSHA validated methods. • Appropriate records of instrument calibration and testing/monitoring results shall be maintained on site with a copy placed in a permanent O&M files. 		
Hazard Control Strategies	<ul style="list-style-type: none"> • Engineering controls such as local or general ventilation shall be instituted to limit exposure to hazardous substances within acceptable limits. • When engineering controls are not feasible, or are not sufficient to limit exposures to hazardous substances within acceptable limits, administrative controls and work practices such as the wetting of hazardous dusts shall be used. • When engineering controls or administrative controls/work practices are not feasible, or are not sufficient to limit exposure to hazardous substances within acceptable limits, PPE programs shall be instituted 		
Approved By:	<input type="checkbox"/> Director, Operations and Maintenance <input type="checkbox"/> Department Manager <input type="checkbox"/> Manager, HSE (Operations and Maintenance)		
Signature:			
Date:			

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Hazard Communication Program

Hazard Communication Program
All

The HRH Hazard Communication Program meets federal OSHA (29 CFR 1910.1200) and Hawaii 12-60-2(b) requirements and shall be readily available to employees at each project site. This section provides a summary of the requirements in the written program, which includes information on container labeling, the availability of safety data sheets (SDS), employee training, and maintaining an inventory of hazardous chemicals and physical agents that are present at the MOW.

At a minimum, employees must adhere to the following procedures:

- Ensure that chemical containers are labeled as to their contents and appropriate health/physical hazard warnings.
- Maintain current SDS for hazardous chemicals present at the MOW.
- Maintain a current list of hazardous chemical materials present at the MOW.
- Ensure site personnel receive initial hazard communication training from HRH Training Department and additional training for newly introduced chemical hazards.
- Ensure that site personnel, subcontractors, clients, or other on-site personnel who may be potentially exposed to hazardous substances are informed of the location and availability of the written hazard communication program, chemical inventory, and SDS.
- Ensure that subcontractors who may bring hazardous chemicals to the project site submit the appropriate SDS to the O&M department to add to the existing file.

Safety Data Sheets
All

Employees are responsible for obtaining the appropriate SDS prior to the introduction of new chemicals at the MOW. As a rule of thumb, SDS shall be obtained directly from the manufacturer or importer of a hazardous chemical to ensure the most recent version of the SDS is obtained. If this is not feasible, copies of SDS can be obtained from product vendors or distributors or from other sources such as SDS databases maintained by various organizations and made available through the Internet.

Container Labeling Requirements
All

Containers of hazardous chemicals located at project sites are required to be labeled according to the HRH Hazard Communication Program. Labeling requirements for containers of hazardous chemicals fall into two categories: primary and secondary containers. Primary containers are those containers received directly from a manufacturer, supplier, vendor, distributor, or importer.

Primary containers shall be labeled, at a minimum, with the following information:

- Identity of the hazardous chemical(s);
- Appropriate physical and chemical hazard warnings; and
- Name and address of the chemical manufacturer, importer, or other responsible party.

Employees shall be responsible for ensuring primary container labels are properly affixed to each container of a hazardous chemical as it is received at a project site. Secondary or portable containers are containers that are used to contain a hazardous chemical that is transferred from a primary container. Secondary containers shall be labeled, at a minimum, with the following information:

- Identity of the hazardous chemical(s); and
- Appropriate physical and chemical hazard warnings.

Primary and secondary container labels shall be prominently displayed on each container and be written in English. Labels can include words, pictures, symbols, or a combination thereof. The labels shall, at a minimum, provide general information regarding the hazards of the chemical(s).

Employee Training and Information
All

Employees who may be potentially exposed to hazardous chemicals and/or physical agents shall receive training and information at the time of their initial assignment and whenever a new hazardous chemical and/or physical agent is introduced into their work area. Employees shall be informed of the following:

- The requirements of the HRH Hazard Communication Program;
- Any operations in their work area where hazardous chemicals and/or physical agents are present; and
- The location and availability of the HRH Hazard Communication Program, the hazardous chemical list and SDS.

In addition, employees shall be trained on the following:

- Methods and observations that may be used to detect the presence or release of a hazardous chemical and/or physical agent in their work area;
- The physical and health hazards of hazardous chemicals and/or physical agents in their work area;
- The measures employees can take to protect themselves from these hazards; and
- The details of the HRH Hazard Communication Program including an explanation of container labeling requirements, an explanation of how to obtain information from an SDS and an explanation as to how employees can obtain and use the appropriate hazard information.

Employees who perform non-routine tasks (i.e., confined space entry) shall receive additional training prior to performing the tasks. The training shall address hazardous chemicals and/or physical agents that the employees may be exposed to and the proper precautions that the employees can take to reduce or avoid exposure.

WORKING WITH HAZARDOUS SUBSTANCES**Bloodborne Pathogens****Bloodborne Pathogens**

All

Bloodborne pathogens (BBP) can be present in human blood or other bodily fluids and can be transmitted when these materials come in contact with mucous membranes (eyes, nose, and throat) and/or non-intact skin (due to cuts, abrasions, burns, or rashes). BBP exposure can also occur when materials contaminated with blood or other bodily fluids are injected under the skin in such instances as a needle stick or broken glass puncturing intact skin.

Employees are not required to perform first aid and CPR services as part of their job description. However, in the event of an injury, an employee may administer first aid or CPR if they are properly trained. Therefore, HRH has developed a BBP Program to manage potential exposures to BBP. This section provides basic information and guidelines for bloodborne pathogens.

BBP hazards can include the Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV). HBV is more persistent than HIV and is able to survive for at least one week in dried blood on environmental surfaces. HIV will not survive for more than a few minutes when exposed to room temperature air. HBV usually has mild symptoms that can make diagnosis difficult. HIV infections are usually not diagnosed for years and symptoms may not appear for months or years. This is no cure for either HBV or HIV, however, HBV can be prevented with a vaccine.

BBP Exposure Precautions

All

Individuals who are infected with HBV or HIV may not show symptoms and may not know they are infectious. For this reason, all human blood and bodily fluids should be considered as infectious, and precautions should be taken to avoid contact. Precautions required to prevent or minimize the chance of exposure to BBP are referred to as universal precautions.

If an employee administers first aid and/or CPR, he or she shall adhere to the following universal precautions as applicable.

- Call 911 or summon help as needed.
- Don impervious gloves, safety glasses, safety goggles, and/or a face shield as necessary if there is a chance of exposure to blood or other bodily fluids.
- Avoid contact with blood or other bodily fluid whenever possible by allowing the injured person to assist with the first aid procedures by providing them with bandages, towels, etc. and advising them on the proper first aid procedures.
- Use a resuscitation device when performing CPR to prevent direct mouth-to-mouth contact.
- Containerize porous materials, used bandages, other materials that cannot be decontaminated, and personal protective equipment and label container as containing biohazardous waste.
- Decontaminate solid surfaced areas which blood or other bodily fluids may have contacted with the use of a mild solution of household bleach and water. Allow at least a 10-minute contact time with the solution.
- Following treatment, immediately wash your hands and other affected areas thoroughly with soap and warm water.
- Flush your eyes, nose, or other mucous membrane areas with water, if exposed.
- Report all BBP exposures or potential exposures immediately to the SSQHE Department.
- Seek follow-up medical evaluation and treatment, if necessary.