

# Standard Operating Procedure

## Hazardous Chemical Handling

### HAZARDS:

Chemical Exposure and Muscle Strain

### INTRODUCTION

- Hazardous chemicals in the workplace are substances, mixtures and materials that are classified according to their health and physicochemical risks and dangers.
- This procedure outlines the processes relating to storing and handling hazardous chemicals
- This procedure ensures the risk associated with handling hazardous chemicals are adequately eliminated or minimized

### PPE:

Wear protective clothing, including safety goggles, mask, overalls, boots and chemical resistant disposable gloves

### PROCEDURE:

#### Safety Data Sheets (SDS)

- Check the Chemical Register on site folder to identify the chemicals classified as hazardous
- Exposure controls, which consist of all steps necessary to protect workers from exposure to a substance and personal protection
- Check SDS sheet for chemical to be decanted and check for manufacturer's recommendations on handling
- Ensure that all equipment for the task are assembled prior to removing chemical from storage.
- Ensure to read the chemicals labels carefully prior to removing chemical from storage.
- Ensure to read First aid measures and emergency information including firefighting and accidental release measures

#### Labelling

- All hazardous chemicals are to be correctly labelled including any chemicals that are transferred or decanted from the chemical's original container at the workplace.
- Containers that are labelled for holding a hazardous chemical shall be used only for the use, handling or storage of the hazardous chemical.
- Chemical label would provide:
  - ➔ The product identifier (the name or number used to identify a product on a label or in a SDS)
  - ➔ The name, Australian address and business telephone number of either the manufacturer or importer
  - ➔ The identity and proportion disclosed for each chemical ingredient
  - ➔ Any hazard pictograms (Visual Signs) consistent with the correct classifications of the chemical

- ➔ Any hazard statements, signal word and precautionary statements that are consistent with the correct classifications of the chemical
  - ➔ Any information about the hazards, first aid and emergency procedures relevant to the chemical, which are not otherwise included in the hazard statement or precautionary statement
  - ➔ The expiry date of the chemical, if applicable.
- If the product identifier of an unlabelled chemical is not known, this should be clearly marked on the container (Caution - Do Not Use) and steps should be taken to either identify and correctly label the unknown chemical, or dispose of the contents in accordance with relevant environmental regulations.

### **Risk Assessment**

- In order to eliminate or minimise the risk of injury or illness. The following elements should be considered when chemicals are used in the workplace.
  - ➔ How chemicals should be used
  - ➔ How persons are exposed to chemicals
  - ➔ Whether the risk from the chemical is significant
  - ➔ How exposure to chemicals in the workplace should be controlled.
- Therefore, a chemical risk assessment should be performed to enable efficient decision making and to take appropriate control measures to identify reasonably foreseeable hazards that could give rise to the risk
- Chemical / SDS Risk Assessment will be available on the Site Folder under **Section 3**

### **Storage and Handling**

- It is crucial that proper chemical storage is used to minimize the hazards associated with leaks, spills, and accidental mixing of incompatible chemicals
  - ➔ The quantities of hazardous chemicals should be kept to a minimum
  - ➔ Ensure chemical containers are appropriate for the type and quantity of chemical stored
  - ➔ Ensure shelves on which the hazardous chemicals are stored shall be made from a impervious material that will not react with the substances being stored
  - ➔ Incompatible chemicals shall be kept segregated from one another
  - ➔ Containers are kept closed when not in use
  - ➔ Liquids shall not be stored above powders and solids
  - ➔ Chemicals must not be stored with foodstuffs or personal use products
  - ➔ Chemicals shall be stored away from heating and ignition sources
  - ➔ Please refer the decanting SOP / Procedure / SDS prior mixing or diluting chemicals
  - ➔ Appropriate spill containment shall be provided to contain any spills within the premises

## Storage and Handling

- Transferring hazardous chemicals generally presents a far greater risk than for static storage.
- All chemicals must be placed into a suitable container in instances where decanting is required.
- The type of container required is to be determined through a review of the SDS.
- If there is a risk of spillage during the decanting process, consideration is to be given to containment controls such as bunding, for larger quantities, or suitable trays for smaller quantities.

## Spills Management

- When a spill, leak or accidental release of hazardous chemicals occurs, appropriate actions must be taken to contain the hazardous chemicals within the site
- If an appropriate spill kit made available on site. The minimum contents include:
  - ➔ Absorbent pads and socks
  - ➔ Spill absorbent such as vermiculite
  - ➔ Contaminated waste bags
  - ➔ Acid and alkali neutralisers such as Acid-Sorb
  - ➔ PPE such as gloves and goggles
- In the event of a spill involving the release of a type or quantity of a chemical which does not pose an immediate risk to health and does not involve chemical contamination to the body
  - ➔ Notify personnel in the immediate vicinity of the incident
  - ➔ Isolate the area, close doors and evacuate the immediate area, if required
  - ➔ Remove ignition sources and unplug nearby electrical equipment
  - ➔ Vent vapours to outside of building only (open windows and turn on exhaust fans, if available)
  - ➔ Locate the nearest spill kit, and choose appropriate PPE
  - ➔ Confine and contain spill, such as covering with appropriate absorbent material - acid and base spills should be neutralized prior to clean-up
  - ➔ Sweep solid material into a plastic dust pan and place in a labelled, sealed container
  - ➔ Wet mop spill area - be sure to decontaminate broom, dustpan, etc
  - ➔ Dispose all contaminated items (gloves, clothing, etc.) into a sealed container or plastic bag
  - ➔ Return spill kit to storage location and arrange for used contents to be replaced
  - ➔ Notify the Client Relationship Manager
- In the event of a leak, spill or uncontrolled release that poses an immediate risk to health or involves an uncontrolled fire or explosion cleaner is required to immediately evacuate the area and notify the Client Relationship Manager and/or appropriate emergency services (e.g. ambulance/ fire brigade/ police)

**NOTE: Pay attention at all times to complete tasks safely**

If an emergency situation occurs while conducting this task follow emergency procedure  
Report any Hazardous Situation To Your Supervisor

#### **ENVIRONMENTAL:**

- Remove minor chemical spills according to site requirements.
- Dispose waste materials according to job site requirements and including recycling guidelines.
- Do not dispose waste down storm water drains.
- After use ensure you switch of equipment at power point with dry hands.
- Where applicable ensure correct bin liners and bins are used in accordance with site requirements and recycling guidelines.
- Turn off tap after use.
- Once you have carried out your cleaning duties where applicable switch off lights.

**NOTE:** Report any leaking taps, faulty appliances and incorrect disposal of waste materials to your site supervisor or manager.