

Section 4.05

Hazardous Substances and Dangerous Goods

1. Purpose

The purpose of this procedure is to provide guidance on the safe handling and storage of hazardous substances and dangerous goods.

[This procedure incorporates the determination and classification of hazardous substances, dangerous goods, general safe storage and handling requirements, and Material Safety Data Sheets (MSDS).]

2. Scope

This procedure applies to the use and application of all hazardous substances and dangerous goods in all Council workplaces.

3. References

1. Occupational Health and Safety Act 2004
2. Occupational Health and Safety Dangerous Goods Act 1985.
3. Dangerous Goods (Storage and Handling) Regulations 2000.
4. Occupational Health and Safety (Hazardous Substances) Regulations 1999 No. 94
5. Australian Code for the Transport of Dangerous Goods by Road and Rail (Sixth Edition).

4. Responsibilities

Manager/Supervisor

Managers/Supervisors are responsible for:

undertaking a **Hazard Identification** and **Risk Assessment** of hazardous substances and dangerous goods under the control of the Council (see Section 3.06, *Hazard Identification*); and

establishing an **Inspection Program** for storage areas and implementing appropriate **Emergency Response Plans** (see Section 3.09, *Emergency Planning*).

Human Resources Manager (HRM)

The HRM is responsible for ensuring employees who purchase, handle or store hazardous substances and dangerous goods are provided with appropriate training, instruction and supervision.

Employees

Employees are responsible for:

active participation in training programs for the purchasing, storage and handling of hazardous substances and dangerous goods; and



following the safety instructions published on Material Safety Data Sheets (MSDSs) for the storage and handling of hazardous substances and dangerous goods.

5. Definitions

Hazardous Substances

Hazardous substances are chemicals and materials which present a health hazard, including substances that can cause skin irritation, allergies, burns, or other adverse health effects.

Dangerous Goods

Dangerous goods are substances which may present a safety hazard because of their chemical or physical properties such as flammability, high pressure (eg cylinder) or chemical reactivity.

NB Many substances will be both a hazardous substance and a dangerous good.

Material Safety Data Sheet (MSDS)

A MSDS shall provide or outline the following information:

1. A statement of the hazardous nature of the substance.
2. Identification (eg UN number, Class, HAZCHEM code etc).
3. Physical description/properties.
4. Ingredients.
5. Health hazard information.
6. Precautions for use.
7. Safe handling instructions.
8. Fire protection requirements.

6. Method

Managers/Supervisors are responsible for the safe handling and control of hazardous substances and dangerous goods under their control and shall store and handle them in accordance with the Dangerous Goods (Storage and Handling) Regulations 2000.

Hazards that may be associated with the storage and handling of hazardous substances and dangerous goods include:

1. Physical contact:
 - Eye contact;
 - Skin contact;
 - Ingestion; and
 - Inhalation.
1. Fire and explosion; and
2. Environmental effects.



Hazard Identification

Prior to the purchase of any hazardous substances or dangerous goods, Managers or a nominated Responsible Officer, shall assess the hazards related to the use and storage of such substances. (Refer to Section 3.06, *Hazard Identification* and Section 3.11, *Purchasing*).

Details of the assessment are to be filed with the **Hazardous Goods Register** held at each site and an **MSDS Register** will be established for each site where hazardous substances and dangerous goods are used and/or stored. (see Attachment 1)

Upon purchase of any new hazardous substance and dangerous good, a Material Safety Data Sheet (MSDS) must be obtained from the manufacturer or supplier.

The MSDS shall remain on site for the duration of the use of the hazardous substance and dangerous good, and shall be readily available to any employee or contractor.

Assessment of Risk

The Manager/Supervisor shall evaluate the risks associated with the use of hazardous substances and dangerous goods. The following factors shall be taken into consideration and reference should be made to Section 3.06, *Hazard Identification*, the:

nature of any potential hazard;
severity of the consequences; and
probability of the hazard eventuating.

A variety of substances may be available for purchase which cater for a particular application and the product which is selected should, generally, be that product which minimises the hazards associated with its use. (Reference should be made to Section 3.11, *Purchasing*.)

Risk Control

The results obtained from the risk evaluation will provide employees and contractors with adequate information to determine the degree of control necessary to minimise the risk.

The preferred options for risk control are in the following descending order:

1. **Removal** - Hazardous materials shall be removed from the immediate area;
2. **Substitution** – use of a less hazardous substance;
3. **Engineering Control** - dilution or ventilation;
4. **Administrative controls** - induction, training, job rotation, safe work procedures;
5. **Personal Protective Equipment** - protective clothing, respirators, safety glasses.

Substances shall only be stored and handled according to the MSDS and only used for their intended use.



Training

Employees required to handle or store hazardous substances/dangerous goods shall receive adequate training relative to the level of risk encountered when handling or storing the substance. (See Section 3.05, *Training Procedure*)

Training of employees using hazardous substances/dangerous goods should include relevant information in relation to:

Hazard recognition;

Safe handling of hazardous substances;

Limit of exposure;

Personal Protective Equipment (use, fit and maintenance);

Health effects of exposure;

First Aid and treatment for exposure; and

Response to incident or emergency involving the particular hazardous substance(s).

General Requirements

Central Register and MSDS Listing

A **Central Register** of hazardous substances and dangerous goods at the workplace shall be compiled and kept up-to-date by the HRM.

The **Register** shall include details of types, quantities, storage and location of hazardous substances or dangerous goods, and a reference to the relevant MSDS and where it is located.

Packaging

All substances will be retained in the original packaging where practicable. Where necessary, substances may be decanted into a similar container or containers approved by the Manager/Supervisor.

All containers must be accurately, clearly and durably labelled to ensure proper identification and safe handling information.

Signage

Safety signage shall be placed in the areas in which hazardous substances and/or dangerous goods are stored. Signs shall also be used to identify the potential risks associated with the hazardous substances and/or dangerous goods.

Dangerous goods stores (including gas cylinder stores, workshops, fuel store, and cleaner's rooms) shall be inspected and appropriate composite warning signs shall be posted as appropriate. The composite warning sign (eg 3YE) must be selected in accordance with the relevant legislation or in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (Sixth Edition).



Storage

All designated Dangerous Goods Storage Areas shall:
have access restricted to authorised personnel only;
be signed in accordance with the applicable legislation;
be tidy and well maintained and kept free of combustible materials;
be well clear of and away from ignition sources and naked flames; and
provide adequate ventilation in the areas where decanting of hazardous substances is undertaken.

The Manager/Supervisor shall ensure that all goods are stored in accordance with relevant legislation and the MSDS for the safe storage of the hazardous substance.

The following requirements shall also apply.

Shelves on which the dangerous goods are stored shall be made from an impervious material which will not react with the dangerous goods being stored.

Flammable goods shall be stored away from ignition sources and open flames.

Appropriate spill containment shall be provided to ensure containment of any spill within the premises.

Disposal

The disposal of any hazardous substances shall be undertaken in accordance with the Dangerous Goods Regulations and the Environmental Protection Act and authorised by the Manager/Supervisor.

Further queries may be answered by the manufacturer or supplier and the Environmental Protection Authority.

Inspections

Regular **Inspections** shall be conducted by the Manager/Supervisor to ensure compliance with requirements of this procedure.

All Inspections shall form part of the regular **Hazard Identification Checks** and be retained on file throughout the duration of use and storage of the hazardous substance.

Fire Fighting Equipment

Appropriate fire fighting equipment shall be provided in the immediate vicinity of any Dangerous Goods Store and employees shall be trained in the proper use of such fire fighting equipment.

7. Related Documents

1. Section 3.05, *Health and Safety Training*.
2. Section 3.06, *Hazard Management*.
3. Section 3.12, *Purchasing*.



8. Attachments

1. MSDS Register



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