

**Mandatory – Quality Area 3**

## **Chemical Hazards**

### **1. Authorisation**

This policy was adopted by the Committee of Armadale Early Learning Centre Inc., at its Committee meeting on 2nd December, 1997.

### **2. Review Date**

This policy was last reviewed **November 2013** and is to be reviewed every 3 years or when deemed necessary. This policy is due to be reviewed **November 2016**.

### **3. Scope**

This policy applies to the Approved Provider, Nominated Supervisor, Certified Supervisor, educators, staff, Committee of Management, students on placement, and volunteers, who deal with hazardous chemicals at AELC.

### **4. Background and Legislations**

#### **4.1 Background**

In compliance with the *Occupational Health and Safety Act 2004* (OHS Act), AELC has a duty to protect the health and safety of its employees and other persons, including children, students, volunteers and visitors to the service.

This procedure and related guidelines provide information to assist staff to meet legislative requirements for the safe use of chemicals and to implement effective management practices.

#### **4.2 Legislation and standards**

Relevant legislation and standards include but are not limited to:

- *Education and Care Services National Law Act 2010*
- *Education and Care Services National Regulations 2011*
- *National Quality Standard, Quality Area 2: Children's Health and Safety*
  - Standard 2.3: Each child is protected
    - Element 2.3.2: Every reasonable precaution is taken to protect children from harm and any hazard likely to cause injury
- *Occupational Health and Safety Act 2004*
- *Occupational Health and Safety Regulations 2007*
- *Dangerous Goods Act 1985*
- *Dangerous Goods (Storage and Handling) Regulations 2012*

## **5. Definitions**

**Dangerous Goods:** Items or substances that may present an immediate safety hazard such as fire, explosion or toxic cloud emission. Dangerous goods are designated into nine different categories under the Australian Dangerous Goods Code (ADG7 Code) according to their immediate physical or chemical effect. They are easily recognisable by the diamond shaped sign displayed on the substance label.

**Hazard:** An element with the potential to cause death, injury, illness or disease.

**Hazard identification:** A process that involves identifying all foreseeable hazards in the workplace and understanding the possible harm that each hazard may cause.

**Hazardous Substance:** Dilute or concentrated substances in solid, liquid or gas form that have the potential to present a risk of harm to human health during handling or use. A substance is classified as hazardous by the Hazardous Substance Information System (HSIS) based on its health effects.

**Hazard management:** A structured process of hazard identification, risk assessment and control, aimed at providing safe and healthy conditions for employees, contractors and visitors while on the premises of AELC or while engaged in activities endorsed by AELC.

**Harm:** Includes death, or injury, illness (physical or psychological) or disease that may be suffered by a person as a consequence of exposure to a hazard.

**Material safety data sheet:** Provides employees and emergency personnel with safety procedures for working with toxic or dangerous materials. The data sheet includes all relevant information about the material such as physical properties (e.g. melting/boiling point, toxicity and reactivity), health effects, first aid requirements and safe handling procedures (e.g. personal protective equipment, safe storage/disposal and management of spills).

**Non-hazardous chemicals:** Chemicals that are not classified as hazardous chemicals are referred to as non-hazardous chemicals. Non-hazardous chemicals generally do not represent a threat to the health and safety of employees and others provided that they are used for the purpose specified and in the manner specified.

**OHS representative:** A committee representative that facilitates co-operation between an employer and employees in instigating, developing and carrying out measures designed to ensure the health and safety of employees in the workplace.

**Risk:** The chance (likelihood) that a hazard will cause harm to individuals.

**Risk assessment:** A process for developing knowledge/understanding about hazards and risks so that sound decisions can be made about the control of hazards. Risk assessments assist in determining:

- what levels of harm can occur
- how harm can occur
- the likelihood that harm will occur.

**Risk control:** A measure, work process or system that eliminates an OHS hazard or risk, or if this is not possible, reduces the risk so far as is reasonably practicable.

## **6. Policy**

### **6.1 Values**

AELC is committed to minimising the risk to children associated with chemical contamination of their environment at the centre. It is also committed to maximising the safety of staff, volunteers and parents who may handle chemicals at the centre.

### **6.2 Purpose**

The policy is in place to ensure:

- only appropriate cleaning chemicals are used at the centre
- all chemicals are safely stored
- all chemicals used will be handled in such a way as to minimise the risk or spread of that chemical
- that the toxicity of chemicals and building materials are considered before being used at the centre
- up-to-date poisons information will be kept on site
- adherence to this policy by including it in the scope of the regular Occupational Health & Safety audits and corrective action
- limitation of chemicals on site to those necessary to effectively operate the centre, and the safe handling, disposal and storage of all chemicals on site

## **7. Procedures**

### **7.1 Chemical Register and MSDS/Safety Information**

The Nominated Supervisor and/or Committee OHS Representative is to ensure that all **dangerous goods** and **hazardous substances** stored or handled in the workplace are entered into a Chemical Register and MSDS are obtained.

The Chemical Register (refer to Attachment 1) is to be kept up to date and reviewed when hazards are identified, risk controls are changed or new chemicals are introduced to the workplace. The Nominated Supervisor and/or Committee OHS Representative must maintain a hard copy collection of current MSDS (issued within 5 years) from the manufacturer or supplier of all chemicals stored and used in the workplace.

Where a MSDS has not been provided by the manufacturer, one may be obtained from the supplier.

*Note: The MSDS obtained for each chemical must be the authorised version prepared by the manufacturer or first supplier.*

The Chemical Register and associated MSDS is to be kept by the Nominated Supervisor and/or Committee OHS Representative in a central location which is known and accessible to all employees in the workplace as well as any other person who is likely to be exposed to the hazardous substances and/or dangerous goods. Each MSDS should be reviewed to consider and manage any associated risk, and relevant details entered into the Chemical Register.

## 7.2 Identify Dangerous Goods and Hazardous Substances

The Nominated Supervisor and/or Committee OHS Representative is to identify all dangerous goods and hazardous substances within the workplace and enter them into a Chemical Register.

While dangerous goods are generally easy to identify (the diamond symbol on the product/label indicates the class), hazardous substances can be more difficult to identify.

The product label provides some information about the hazards of the substance and precautions for use. If the product is a hazardous substance the label should display the word 'hazardous' or other similar warnings. The MSDS will be the primary information source for most chemicals and includes details about substance identity, chemical and physical properties, health hazard information and precautions for storage, use and safe handling. Another source of information is the online Hazardous Substances Information System (HSIS) accessible at <http://hsis.ascc.gov.au>.

Examples of types of hazardous substances include:

- Acids
- Caustic substances
- Disinfectants
- Pesticides and herbicides
- Solvents and thinners

Note: Based on DEECD guidelines, there are a number of restricted substances which must not be kept by AELC (refer to section 7.5 *Restricted Substances*).

## 7.3 Introducing Dangerous Goods/Hazardous Substances into the Workplace

The Nominated Supervisor and/or Committee OHS Representative must ensure that the risks associated with procurement of goods are identified prior to purchase. New substances may present a risk to employees, students, contractors and visitors. Consideration also needs to be given to children with known sensitivities to chemicals and/or allergens. Potential risks associated with a new chemical must be identified prior to purchase.

The Nominated Supervisor and/or Committee OHS Representative must make sure that no new substances are introduced into the workplace without first receiving the manufacturer's MSDS and determining if the chemical can be safely introduced into the workplace (refer to Section 7.4 *Controlling Risks*).

## 7.4 Controlling Risks

### 7.4.1 Risk Management of Dangerous Goods and Hazardous Substances

The Nominated Supervisor and/or Committee OHS Representative need to control and reduce risks in accordance with the information provided in the MSDS.

At all times the Nominated Supervisor and/or Committee OHS Representative should make sure the risks posed to employees, students, contractors and visitors from dangerous goods and hazardous substances is as low as reasonably practicable.

Risk controls (from most to least effective) could include:

- Elimination - eliminate the use of the substance (e.g. using a physical process

instead of a chemical process).

- Substitution - use a safer substance or a safer form of the substance (e.g. using a detergent instead of chlorinated solvent for cleaning).
- Engineering - physical controls that eliminate isolate or reduce exposure to people or property (e.g. provision of drip trays to limit the area of contamination in the event of spills and leaks).
- Administrative - using administrative processes including good housekeeping and storage practises (e.g. vacuuming or wet sweeping to suppress dust being generated, storing chemicals in purpose built cabinets).
- Personal protective equipment (PPE) - protective clothing and equipment for employees, contractors and visitors (e.g. overalls, gloves, chemical resistant safety glasses).

#### *7.4.2 Labelling*

The Nominated Supervisor and/or Committee OHS Representative must make sure that all dangerous goods and hazardous substances are clearly labelled to ensure proper identification. The label on the container in which the dangerous good and/or hazardous substance is supplied in must be intact, legible and unaltered.

All chemicals shall be retained in their original packaging where practicable, or where necessary decanted into a suitable container recommended by the manufacture/supplier. To allow for monitoring of the age of the chemical and the use of older materials first, the date of receipt and date of opening of the container should be marked on the original container.

The Nominated Supervisor and/or Committee OHS Representative must make sure that all decanted chemicals are correctly labelled if not used immediately, including the product name and Dangerous Goods Class/Division diamonds for dangerous goods (if applicable).

Containers with unknown substances in them should be labelled 'CAUTION DO NOT USE: UNKNOWN SUBSTANCE' and then disposed of in accordance with local government waste guidelines.

#### *7.4.3 Storage and Handling*

Proper chemical storage is required to minimise the hazards associated with leaks, spills, and accidental mixing of incompatible chemicals. The quantities of hazardous chemicals should be kept to a minimum.

When handling and storing chemicals, the following precautions should be observed;

- Stored and handled as per directed on label or MSDS e.g. store out of direct sunlight
- All chemicals will be stored out of reach of children (and if possible outside any area occupied by children in the container in which they were purchased).
- All cleaning chemicals used by the cleaner must be stored in its designated area and must have the doors closed and latches down at all times.
- All washing up liquids and cleaning aids used by staff must be stored in cupboards above sinks.
- Wherever possible, Dangerous Goods and Hazardous Substances must be

stored in original containers and labelled as supplied. It is prohibited to use drink or food containers (discarded or new) to store chemicals.

If transferred to or kept in other containers, these must be compatible, suitable for the purpose and labelled with name, toxicity level, expiry date, and recommended emergency procedures.

- Container including lids, caps and seals, must be checked regularly for deterioration and replaced when necessary
- Chemicals should be stored away from any heating and ignition sources
- Regularly review the chemicals held in storage and correctly dispose of those no longer required
- Wear appropriate PPE as directed by label or MSDS
- After handling chemicals, hands should be washed prior to coming into contact with children, eating, or drinking.

The Nominated Supervisor and/or Committee OHS Representative must make sure that **if** the workplace is storing **dangerous goods** exceeding the minor storage quantities, placards are provided as a visual warning. For more advice contact the OHS Advisory Service on **1300 074 715** or your Regional OHS/WorkSafe Advisor.

#### *7.4.4 Disposal of Chemicals*

The Nominated Supervisor and/or Committee OHS Representative must make sure dangerous goods and hazardous substances are disposed of in accordance with local legislation. For more advice on disposal, please contact the OHS Advisory Service on **1300 074 715** or your Regional OHS/WorkSafe Advisor.

### **7.5 Restricted Substances**

The following chemicals are prohibited to use at AELC due to the associated risks with their use:

- ammonium nitrite
- asbestos fibre
- benzene
- carbon disulfide
- carbon tetrachloride
- chloroform
- 1,2-dichloroethane (ethylene dichloride)
- hydrofluoric acid
- perchloric acid
- picric acid
- potassium cyanide
- sodium cyanide
- toluene (methyl benzene)
- Any substance that is listed in Appendix A of the 7th Edition of the ADG Code as Goods Too Dangerous to be Transported
- Any substance requiring a permit under the Victorian Poisons Code (all S4, S8 & S9 plus those S7 Poisons listed in Part 2 of that Code)
- All Scheduled Carcinogenic Substances

If any of these restricted substances are found in the workplace, they must be immediately disposed of following advice from local government authorities, or by contacting a chemical disposal agent. For further information please contact the OHS Advisory Service on **1300 074 715** or your Regional OHS/WorkSafe Advisor.

### **7.6 Potential poisons in the environment**

Educators also need to be aware of potential poisons in the environment. Please refer to the following guidelines when working in the garden/outside with children;

- Teach children what they can and cannot eat from the garden. Remind them to wash everything first.
- Be aware of and avoid poisonous parts of plants. All parts of some plants are poisonous including datura, Lily of the Valley, rhododendrons, azaleas, oleander. *Poisonous leaves:* Rhubarb and tomato. Others have poisonous saps, flowers, seeds, fruits or bulbs.
- Test soils for poisons like lead and asbestos if likely. Avoid using things that may contain lead paint.
- Don't use pressure-treated wood, timbers from packing cases, creosote-treated timber or railroad ties for building gardens.
- Garden organically and use natural pest control methods (refer to [www.kidsgrow.com.au](http://www.kidsgrow.com.au)).

Please refer to the Grow me Safely website for a comprehensive list of plants to avoid at <http://www.kidsafensw.org/growplantssafely/#plants-to-avoid>.

## **8. Key Responsibilities & Authorities**

### **8.1 Nominated Supervisor and/or Committee OHS Representative**

Nominated Supervisor and/or Committee OHS Representative are responsible for:

- Ensuring that all dangerous goods and hazardous substances are identified within the workplace and included in a chemical register;
- Ensuring risk assessments and controls are established for dangerous goods and hazardous substance use
- Conducting (or delegating) daily and monthly OH&S checks
- Ensuring that all containers housing hazardous chemicals are appropriately labeled with relevant safety information.
- Ensuring safety information, including MSDS and the Chemical Register is readily available;
- Ensuring chemicals are not introduced into the workplace without considering and managing any associated risk;
- Ensuring restricted substances are not used or stored in the workplace;
- Providing appropriate training and Personal Protective Equipment (PPE) for employees who may be exposed to dangerous goods and hazardous substances; and
- Preventing access by unauthorised persons/children to hazardous materials stored or handled at AELC.

## 8.2 Employees

Employees are responsible for:

- Referring to the MSDS when using a chemical for the first time to ensure any precautions for use are known and followed
- Using safety equipment or personal protective equipment when required
- Ensuring all dangerous goods and hazardous substance use and storage is in accordance with the MSDS
- Supporting the Nominated Supervisor and/or Committee OHS Representative in the implementation of and adherence to policies and procedures relating to dangerous goods and hazardous substances.

## 8.3 Contractors, volunteers, and students

Contractors, volunteers, and students are responsible for:

- Referring to the MSDS when using a chemical for the first time to ensure any precautions for use are known and followed
- Using safety equipment or personal protective equipment when required
- Advising staff of any faults in the control systems (e.g. faulty equipment) and any dangerous occurrences, near misses, injuries and illnesses associated with handling of hazardous materials.

Further, contractors engaged at AELC must comply with legislative obligations including having appropriate MSDS, labels, risk assessments, work method statements and control measures in place for work they undertake on site to ensure risks to AELC communities are managed.

## 9. Circulation Plan

Who needs to know the policy and procedures exists?

- Staff and Committee members
- Cleaning staff and other contractors using chemicals on site

### 9.1 Method

A copy of the Policy will be adopted by the Committee and will be available upon request, in the Policy Manual (located in the AELC foyer), and available on the AELC website [www.armadaleelc.vic.edu.au](http://www.armadaleelc.vic.edu.au).

## 10. Resources and Support

### 10.1 Sources

- Victorian Poisons Information Centre: <http://www.austin.org.au/poisons>

**Telephone: 13 11 26**

In the event of a child coming into contact with a poison, staff will immediately contact the Poisons Information number and seek advice prior to carrying out any first aid.

- OHS in Early Childhood Services (ELAA): [www.ohsinecservices.org.au](http://www.ohsinecservices.org.au)
- WorkSafe Victoria: [www.worksafe.vic.gov.au](http://www.worksafe.vic.gov.au)

## 10.2 Service Polices

- *Child Safe Environment Policy*
- *Emergency Management and Evacuation Procedure*
- *Incident, Injury, Trauma and Illness Policy*
- *Kitchen Garden Programme*
- *Occupational Health and Safety Policy*

## 11. Evaluation

In order to assess whether the values and purposes of the policy have been achieved, the Approved Provider will:

- regularly seek feedback from everyone affected by the policy regarding its effectiveness
- monitor the implementation, compliance, complaints and incidents in relation to this policy
- keep the policy up to date with current legislation, research, policy and best practice
- revise the policy and procedures as part of the service's policy review cycle, or as required
- notify parents/guardians at least 14 days before making any changes to this policy or its procedures.

## 11. Attachments

- Attachment 1: Establishing a Chemicals Register
- Attachment 2: Hazardous Substances Checklist

| Date Reviewed | Details of Changes (if any) | Date of Next Review |
|---------------|-----------------------------|---------------------|
| August 2000   |                             |                     |
| May 2000      |                             |                     |
| March 2011    |                             |                     |
| October 2013  |                             |                     |

## Attachment 1

### Establishing a Hazardous Substances (Chemicals) Register

A hazardous substances register identifies and lists all the hazardous substances used in your workplace. The material safety data sheet (MSDS) for each listed chemical should be included with it.

The hazardous substances register must be kept up to date. Following the four key steps below will help you to establish and maintain your register:

1. Identify all hazardous substances - list them by product name in a folder which will be available to all employees and volunteers who may use these chemicals as part of their work
2. Maintain an electronic copy of the register for those working with the chemicals. A printed copy should also be readily available. If chemicals are used in different areas of the organisation (for example, by cleaners, kitchen staff, gardeners) you should provide a copy of the register for workers in each area.
3. Make sure you have the MSDS for each listed hazardous substance - manufacturers, importers and suppliers have a legal obligation to provide this information for you on request.
4. Maintain your register - establish a review process so new hazardous substances are added, and discontinued chemicals are removed. Check that your MSDS is current - ask your suppliers if there have been any changes.

Please refer to the following pages for a sample template for a Chemicals Register and Assessment.

## Chemicals (Hazardous Substances/Dangerous Goods) Register

Service name: ..... Service address: .....

Roles and names of persons compiling register: ..... Date: .....

| Product Name | For what purpose is this chemical used? | Is this a Hazardous Substance? | Is this a Dangerous Goods? |          | Material Safety Data Sheet (MSDS) |             | Risk Assessment |            | Actions/ Comments |
|--------------|---|--------------------------------|----------------------------|----------|-----------------------------------|-------------|-----------------|------------|-------------------|
|              |   | Yes/ No                        | Yes/ No                    | DG Class | Yes/ No                           | Issue Date* | Yes/ No         | Issue Date |                   |
|              |   |                                |                            |          |                                   |             |                 |            |                   |
|              |   |                                |                            |          |                                   |             |                 |            |                   |
|              |   |                                |                            |          |                                   |             |                 |            |                   |
|              |   |                                |                            |          |                                   |             |                 |            |                   |
|              |   |                                |                            |          |                                   |             |                 |            |                   |
|              |   |                                |                            |          |                                   |             |                 |            |                   |

Next date for review of register: .....

\*All hazardous substances/dangerous goods must have an up-to date MSDS no more than five years old. The MSDS should state that the product is hazardous or, in the case of dangerous goods the DG Class.

# Chemicals (Hazardous Substances/Dangerous Goods/Other) Assessment

Job/activity description: ..... Work area description: .....

| Chemical substance/goods | Description of use<br>(list tasks carried out and equipment used) | Routes of exposure<br>(inhalation, ingestion, eye/skin contact, injection) | Current safety measures/risk controls | Is there a risk to health? |              | Risk assessment | Actions/comments<br>(include by whom and when) |
|--------------------------|---|--|---------------------------------------|----------------------------|--------------|-----------------|--|
|                          |   |  |                                       | Yes/No/Not sure            | Give reasons |                 |  |
|                          |   |  |                                       |                            |              |                 |  |
|                          |   |  |                                       |                            |              |                 |  |
|                          |   |  |                                       |                            |              |                 |  |

Reported health effects/impacts/incidents: .....

Comments: .....

**Assessors** (must include an employer or management representative) .....  
 Name and signature ..... Date ..... Name and signature ..... Date .....

**Authorised by** .....  
 Name and signature ..... Date .....



## Attachment 2

### Hazardous Substances (Chemicals) Checklist\*

Workplace: ..... Date: .....

Checklist completed by: .....

.....  
 .....

Date for review of agreed actions: .....

| HAZARDOUS SUBSTANCES   | YES<br>✓ | NO<br>⇒ | COMMENT /<br>ACTION BY DATE |
|--|----------|---------|-----------------------------|
| Material Safety Data Sheets (MSDS) available for all hazardous substances in the workplace         |          |         |                             |
| Hazardous substances register kept (and up to date)  |          |         |                             |
| Procedures in place to dispose of all chemicals appropriately                                      |          |         |                             |
| All chemicals clearly labelled   |          |         |                             |
| Hazardous substances kept in locked cupboards or drawers   |          |         |                             |
| Emergency procedures in place and known by all employees/volunteers                                |          |         |                             |
| All workers instructed in correct use of hazardous substances, and provided with any necessary PPE |          |         |                             |
| Fire extinguishers (of correct type) located close to chemical storage areas                       |          |         |                             |
| Facilities to deal with chemical spills or splashes maintained nearby to areas of chemical use     |          |         |                             |

\*Please note – the above checklist items are captured in the Hazard Identification checklist (Attachment 2 of AELC OH&S Policy), which is conducted one a month. This checklist can be used as an additional resource, if required.