

# LA TROBE UNIVERSITY

## CHEMICALS MANAGEMENT PROCEDURE

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### 1. **PURPOSE**

The purpose of this procedure is to ensure that chemicals classified as Hazardous Substances (HS), Dangerous Goods (DG) or Prescribed Drugs or Poisons under Victorian legislation are used (produced, stored, handled and disposed of) in accordance with the relevant regulations.

### 2. **DEFINITIONS**

#### **Australian Code for the Transport of Dangerous Goods (DG) by Road and Rail (ADG Code)**

This Code provides a code which provides the technical basis for land transport and regulation of DG by road and rail. It also provides a classification system which can be used in conjunction with the Dangerous Goods legislation. The 7<sup>th</sup> edition of this ADG Code is due for re-release in 2005.

#### **Atmospheric monitoring**

As defined in the Occupational Health and Safety (Hazardous Substances) Regulations, atmospheric monitoring is a procedure whereby air is sampled within the breathing zone of a worker to evaluate their personal exposure to airborne contaminants over a defined time period.

#### **Carcinogen**

A substance or agent which is capable of inducing (causing) cancer.

#### **CAS No.**

An internationally recognized British / American registration number assigned by the Chemical Abstract Services (CAS) to a chemical or a well established mixture. It is a unique number which can be used to identify the chemical or mixture, and should not be confused with either the EC number or product catalogue number of a product.

#### **Class (Dangerous Good Class)**

The primary group to which a chemical is assigned to, if it is so determined to be a Dangerous Good (DG) (as per relevant criteria (regulation 2.2 of the Commonwealth *Road Transport Reform (Dangerous Goods) Regulations 1997*). There are nine (9) Classes of Dangerous Goods (some divided further). The Class identifies the *most significant immediate hazard* presented by the chemical.

#### **Dangerous Good (DG)**

Chemicals which have *immediate physical or chemical effect* (fire, explosion, corrosion, poisoning affecting property, the environment or people) are classified on the basis of that effect. They are regulated under the Victorian Dangerous Goods (Storage and Handling) Regulations 2000.

#### **Drugs, poisons and controlled substances**

Substances as defined in the Poisons Code to be a controlled drug or poison. Only these defined substances are controlled and may include: prescription medicines, pharmacy-only medicines, drugs of addiction and many household, industrial and agricultural chemicals. They are regulated under the Poisons and Controlled Substances Regulations 1995.

#### **Exposure standard**

Airborne concentration of a particular substance in a person's breathing zone, as set out in the Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment published by the National Occupational Health and Safety Commission (NOHSC)

#### **Hazard**

The potential to cause injury, illness or disease

**Hazardous substance (HS)**

Substances that have the potential to harm human health. They are (a) listed in the List of Designated Hazardous Substances or (b) meet criteria for Hazardous Substances set out in Approved Criteria for Classifying Hazardous Substances. Both documents are published by the National Occupational Health and Safety Commission (NOHSC). Hazardous Substances are regulated under the Victorian Occupational Health and Safety (Hazardous Substances) Regulations 1999.

**Health surveillance**

The monitoring and testing of a person's health for the purpose of identifying changes in their health status due to a possible occupational exposure to a hazardous substance.

**Manifest**

A document which must be prepared when the quantity of Dangerous Goods exceeds the quantities listed in the "Manifest Quantity" column in Schedule 2 of the Dangerous Goods (Storage and Handling) Regulations. The principle purpose of the manifest is to provide the emergency services authority with information on the quantity, type and location of Dangerous Goods stored and handled on the premises. This document is prepared by the University's Occupational Health and Safety Section in consultation with individual work areas.

**Material safety data sheet (MSDS)**

A document prepared by the manufacturer, first supplier or importer. It provides information about the substance including: identity, normal uses, physical & chemical properties, ingredients in respect to mixtures, health hazards, first aid advice, emergency information and medical procedures (spills and disposal, fire or explosion), precautions for use, safe handling of substances, storage and transport requirements, supplier or emergency contact information, risk and safety phrases.

**Mutagen**

An agent or substance capable of inducing a genetic mutation in a living cell. They are genotoxic (capable of altering the genetic material of cells. Mutagens are frequently carcinogens, but not all carcinogens are mutagens

**Packing Group:**

United Nations system of categorizing articles or substances according to the degree of danger they present in relation to dangerous goods.

Packing Group I	:	Great danger
Packing Group II	:	Medium danger
Packing Group III	:	Minor danger

**Product name**

The brand name, trade name or most common name of a substance given to it by the manufacturer, importer or supplier of the substance

**Prohibited hazardous substance**

A substance listed in Schedule 2 of the National Model Regulation for the Control of Workplace Hazardous Substances published by the National Occupational Health and Safety Commission, or as determined by the Victorian Workcover Authority (VWA)

**Register**

A list of the product names of all Hazardous Substances used in the workplace and all Dangerous Goods stored and handled in the workplace. A Register is required by both Hazardous Substances and Dangerous Goods legislation and the two separate regulations allow for the generation of a single list to minimise duplication.

**Risk phrase**

A phrase that briefly describes the hazard(s) of a substance as provided in Appendix 1 (Risk Phrases (Health Effects only)) of the List. Similar to safety phrases below, they are normally notated with a prefix of the letter "R" such as R36 and are normally followed by a plain English statement. They may be used singly or in a combined multiple, e.g. R36/38.

**Risk**

The likelihood of injury, illness or disease arising from exposure to a hazard

**Risk Assessment**

A systematic method used to assess hazards. It provides an objective measure of hazards and their associated risks, allowing us to prioritize, compare and then effectively control hazards.

A three step process:

1) Identify hazards	(Hazard identification)
2) Assess the risk (of the hazard)	(Risk Assessment)
3) Control the risk.	(Risk Control)

**Safety phrase**

A phrase that describes the precautions to be taken for safe use of the substance as provided in Appendix III (Safety Phrases) of the List. Similar to risk phrases above they are normally notated with a prefix of the letter "S" such as S36 and are normally followed by a plain English statement. They may be used singly or in a combined multiple, e.g. S36/39.

**Schedule 1 carcinogenic substance**

A substance (or any of its salts) listed in Schedule 1 to the National Model Regulations for the Control of Scheduled Carcinogenic Substances used as a pure substance or in a mixture containing 0.1% or more of that substance, but does not include the asbestos types *amosite* or *crocidolite* as these are covered under separate legislation.

**Schedule 2 carcinogenic substance:**

A substance (or any of its salts) listed in Schedule 2 to the National Model Regulations for the Control of Scheduled Carcinogenic Substances used as a pure substance or in a mixture containing 0.1% or more of that substance, but does not include the asbestos type *chrysotile* or *cyclophosphamide*.

**"Scheduled" Hazardous Substance**

Substance listed in Schedule 3 of the National *Model Regulations for the Control of Workplace Hazardous Substances* (except asbestos) or a substance determined and or gazetted by the Victorian WorkCover Authority (VWA) to require health surveillance.

These substances include: *Acrylonitrile; Inorganic arsenic; Benzene; Cadmium; inorganic chromium; creosote; isocyanates; inorganic mercury; 4,4'-methylene bis 2-chloroaniline (MOCA); organophosphate pesticides; pentachlorophenol (PCP); polycyclic aromatic hydrocarbons (PAH); crystalline silica; thallium; and vinyl chloride*. Currently no substance has been gazetted by the VWA.

**Subsidiary Risk**

Second classification assigned to a Dangerous Good if it displays a significant secondary risk.

**Teratogen**

A substance or agent which can interfere with normal embryonic development.

**UN Number**

A four digit number assigned to a Dangerous Good or a group of Dangerous Goods according to its/their hazard classification and composition under a United Nations classification system. UN numbers can be identified by the prefix letters "UN" and are listed in the ADG Code.

**Use**

Includes the production, handling, storage and disposal of the chemical;

**Workplace**

Any place, whether or not in a building or structure, where employees or self-employed persons work.

### 3 RESPONSIBILITIES

#### 3.1 Deans, Heads of Schools and Divisional Managers

The Head of School or Department is responsible for ensuring that within their area of control:

- a) All activities relating to the production, use, storage, handling and disposal of Regulated Substances (Hazardous Substances and Dangerous Goods) as well as Drugs, Poisons and Controlled Substances meet the requirements of the Regulations. Specific requirements include ensuring that:
  - Registers are maintained in all areas in which regulated substances are stored or used
  - All hazards associated with Regulated Substances are identified
  - Risks associated with Regulated Substances are assessed and appropriate controls are in place
  - Dangerous Goods are appropriately stored and segregated in designated areas
  - Regulated substances are appropriately contained and labeled at all times
  - Material Safety Data Sheets are up to date, compliant and readily accessible to all employees
  - Prohibited Hazardous Substances or Dangerous Goods are not used in the workplace
  - Records of atmospheric monitoring, health surveillance and use of carcinogens are kept for the prescribed periods
- b) Information, instruction and training is provided to all employees either using or who are required to supervise other employees who use Regulated Substances in the course of their work, or who are likely to be exposed to a Regulated Substance or a Drug, Poison or Controlled Substances in the workplace.

Information must be provided to each employee or student using regulated substances which is specific to the nature of the hazards and the risk associated with the use of the substances and the need for, and proper use, of the measures to control the risk.

Training to employees and students using substances must be relevant to the tasks being undertaken and include the following where applicable:

- Hazard identification and risk assessment
- Risk controls and safe working rules for substances to be used
- Selection and use of personal protective equipment
- Emergency procedures

Note: The Occupational Health and Safety Section offers training in this area and should be consulted when determining training needs.

- c) Licenses or permits relating to Regulated Substances or Drugs, Poisons and Controlled substances are obtained and that the School or Department complies with the specific requirements of the licence or permit.
- d) Consultation occurs, where practicable, with the relevant Health and Safety Representative(s) (HSR), when assessing and controlling risks from the use of Regulated Substances or when planning to introduce new Regulated Substances into the workplace.
- e) Atmospheric monitoring is performed when there is an exposure standard for the Regulated Substances and it is uncertain whether the exposure standard may be exceeded or the risk to health cannot be determined by reviewing the information about the substance and examining the nature of the work. The results of any monitoring in the workplace must be provided to all employees on whom personal monitoring was conducted and to any employee who has been, or who has the potential to be, exposed to the hazardous substance monitored.

- f) Health surveillance is provided in accordance with the regulations to employees when they are exposed to a "scheduled" hazardous substance and there is reasonable likelihood of an adverse health effect occurring under the particular conditions of use. Health surveillance must be performed under the supervision of a registered medical practitioner and a copy of the health surveillance report must be given to the employer and as soon as possible to the employee.

### 3.2 Laboratory Manager

If the School or Department has a Laboratory Manager or other person assigned with specific responsibilities to manage Regulated Substances in the workplace, some of the day-to-day management responsibilities may be delegated to that person. This may include ensuring that all activities occur in the School or Department and which involve Regulated Substances such as: the purchase or acquisition of Regulated Substances, the provision of Material Safety Data Sheets (MSDS), the disposal of Regulated Substances, or as delegated by the Head of School or Department occur in such a way as to comply with University Procedures and the Regulations.

### 3.3 Line Manager

A line manager has day-to-day responsibilities for the Health and Safety of employees. This will include principal researchers, academics in charge of teaching programs and section heads of non-academic and ancillary services.

Line managers are responsible for ensuring that Registers are maintained at all times, risk assessments of Regulated Substances are completed and documented prior to use and that identified controls and procedures are adhered to at all times.

### 3.4 Employees and students

All employees and students are responsible for ensuring that they use, handle, store, transport and dispose of Regulated Substances in an appropriate manner and in accordance with University procedures and relevant Regulations.

## 4. PROCEDURES

The following Codes of Practice provide detailed guidance for the control of Regulated Substances and the provisions contained within must be complied with unless specifically exempted:

- Code of Practice for the Control of Hazardous Substances
- Code of Practice for the Storage and Handling of Dangerous Goods
- Poisons Control Plans

The Occupational Health and Safety Section has prepared specific guidelines designed to assist schools and departments in meeting their obligations.

These can be found on the OHS Website at: <http://www.latrobe.edu.au/ohs/>

## 5. REFERENCES

Victorian Occupational Health and Safety Act 1985  
Occupational Health and Safety (Hazardous Substances) Regulations 1999  
Code of Practice - Hazardous Substances, No.24, June 2000  
Dangerous Goods (Storage and Handling) Regulations, 1989  
Code of Practice for the storage and handling of dangerous goods, No. 27, December 2000  
Drugs, Poisons and Controlled Substances Regulations, 1995  
Exposure Standards for Atmospheric Contaminants in the Occupational Environment, NOHSC, 1995  
List of Designated Hazardous Substances, NOHSC, 1999  
Approved Criteria for Classifying Hazardous Substances, NOHSC, 1999

**6. DOCUMENTATION**

- 8.1** Sample Register of hazardous substances form
- 8.2** Sample Risk Assessment Form
- 8.3** Notification of Intention to use a Schedule 2 carcinogenic substance at a laboratory
- 8.4** Record of employees having worked with Schedule 1 and Schedule 2 carcinogenic substances.

The Executive Occupational Health and Safety Committee endorsed this procedure at its meeting on 5 December 2005.