

Health and Safety Chemical Management

HR Health and Safety Policy

Policy

The University will provide a safe and healthy environment for its staff, students and the wider community by ensuring that all chemicals (including chemical waste) are managed in such a way as to meet the needs of the users, demonstrate international best practice and comply with the following legislation and related regulations and bylaws by the application of a comprehensive **Chemical Management System** which will ensure a minimisation of chemical acquisitions, holdings and disposals.

Overview

Chemical management is a systematic approach to procuring, storing, using and disposing of chemicals within a facility. By implementing a **Chemical Management System**, CMS, the University of Auckland can ensure the health and safety of staff and students, prevent accidents, minimise chemical purchases and holdings and minimise chemical waste.

This policy should be read in conjunction with the policy on “The Small Scale Use of Chemicals”. Following the HSNO Code of Practice for University/CRI Exempt Laboratories and a Safe Method of Use relevant to the substance is a means of compliance with this policy.

Applicable Legislation

- Hazardous Substances and New Organisms Act 1996 (HSNO)
- Health and Safety in Employment Act 1992 (HASE)
- Resource Management Act 1991 (RMA)
- Building Act 1991
- Asbestos Regulations 1983
- Fire Service Act 1975
- Radiation Protection Act 1965
- Transport Act 1962
- Land Transport Rule: Dangerous Goods 1999, 45001

Definitions

Hazardous Substances/Waste will be classified using the United Nations Transport of Dangerous Goods Classification:

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|-----|-------------------------------------------------------------------------------|
| 1 | Explosive |
| 2 | Gases: compressed, liquefied or dissolved under pressure |
| 3 | Flammable Liquids |
| 3.1 | Flammable Liquids with a flashpoint below 23°C |
| 3.2 | Flammable Liquids with a flashpoint of 23°C or more, up to and including 61°C |
| 4.1 | Flammable Solids |
| 4.2 | Flammable Solids, substances liable to spontaneous combustion |
| 4.3 | Flammable Solids, substances emitting flammable gases when wet |
| 5.1 | Oxidising Agents |
| 5.2 | Organic Peroxides |
| 6.1 | Toxic Substances |
| 6.2 | Infectious Substance |
| 7 | Radioactive Substances |
| 8 | Corrosive Substances |
| 9 | Miscellaneous Dangerous Substances |

The degree of hazard will follow the hazard classifications set out in the UN Dangerous Goods Code:

- Packing Group 1: Highly hazardous
- Packing Group 2: Moderately hazardous
- Packing Group 3: Minor hazard

Responsibilities

- a) The University Occupational Environmental Health and Safety Advisory Committee (OESHAC) drafts policy and procedures, advises the Vice Chancellor on issues relating to chemical safety, and monitors the effectiveness of the University's policy and the level of statutory compliance. The Chemical Management Plan Technical Working Group (established to write CMS policy) reports directly to OESHAC.
- b) The Occupational Environmental Safety and Health responsibilities of Deans/Directors, Heads of Departments, and School Heads are set out in the University Health and Safety Manual, *Section 1: Policies and Programmes*.
- c) The Hazards and Containment Manager (HCM) and the University Health and Safety Office, together with Human Resources, will be responsible for monitoring implementation of University policy and procedures for the management of chemicals. They will provide advice on the University's chemical management systems and will be the University's point of contact with outside agencies such as the Occupational Safety & Health Service (OSH) of the Department of Labour, and the Regional Fire Service.
- d) The University will provide access to one or more Safety Datasheet databases (SDS Database).
- e) A Chemical Management Safety Committee (CMSC) will be established and operated, as needed, to advise on technical aspects of chemical procurement, storage, use and disposal.
- f) University employees, students, contractors and visitors shall comply with all sections of the Chemical Management Policy and any associated procedures.

Scope of Chemical Management System

- a) All chemicals handled and disposed of by University staff, students, contractors and visitors must be appropriately managed in accordance with the hazardous nature of the substance, to comply with legislative requirements, and to demonstrate international best practice.
- b) In matters relating to purchasing, handling and disposal of chemicals;
 - i. Safety Data Sheets (SDS) must be available.
 - ii. When a hazardous substance is identified, the hazard shall be eliminated. Failing this, the hazard must be isolated. If this is not possible the risk must be minimised.
 - iii. Hazardous chemicals must finally be disposed of using international best practice.
- c) For all chemical substances a record shall exist for their purchase, use and ultimate disposal, according to the University's Chemical Management System.
- d) On matters relating to the disposal of chemicals, the Chemical Management Safety Committee will advise on technical aspects and the Hazards and Containment Manager and University of Auckland Health and Safety Office will advise on the most appropriate management system for disposal and record the disposal. Disposal will include all chemicals: highly hazardous and high volume low risk. A Destruction Certificate (or equivalent) will be provided for all disposals undertaken by outside contractors.

Contractual agreements relating to chemical disposal must comply with legislative requirements, the University of Auckland's Chemical Management System and international best practice.

Inventory Tracking and Control of Chemicals

All chemical substances procured (through whatever means), imported, or prepared on site, will be tracked and controlled whilst the responsibility of The University of Auckland, in that:

- a) **Acquisition:** Will include authorisation for chemical purchase by the Laboratory Manager or Principal Investigator. All chemicals will be clearly identified and labelled. Authorisation of an acquisition signifies acceptance of responsibility for chemical management of the substance in terms of the University of Auckland Chemical Management System. Acquisitions will comply with the policy of minimisation of chemical purchases and chemical holdings.

- b) **Storage:** Storage (including packages and containers) will meet all appropriate Acts and Regulations and be to best practice. Place of storage will be recorded and for extremely hazardous chemicals the person responsible for the chemical will also be recorded. Storage will also include used or waste chemicals.
- c) **Use:** All users of a chemical substance must follow the HSNO Code of Practice and the Safe Method of Use for that substance and demonstrate competence in such use.
- d) **Transportation:** Transportation, primarily between and on campus sites, will be to appropriate legislative requirements, standards and regulations. Delivery of chemicals and removal of waste by contractors must also conform to appropriate legislative requirements, standards and regulations.
- e) **Waste Minimisation and Final Disposal:** This will include chemical consumption, recycling (including solvent recovery) and waste disposal. Disposal will meet all the necessary Acts and Regulations and be to best practice. Disposal will also be recorded and disposal system controlled by the Hazard and Containment Manager for the University. The chemicals disposed will include all chemicals including those which are highly hazardous and those of low risk.
- f) **Tracking:** The aim is to establish a computerised tracking system. However, in the interim an inventory is to be retained by Lab Managers using Excel.

Hazard Identification and Risk Assessment

Identification of chemical hazards must be reported through the University of Auckland Health and Safety hazard identification system. A risk assessment of identified chemical hazards shall be carried out to determine the degree of risk and appropriate control procedures using the University of Auckland hazard assessment method for each identified hazard. It is the responsibility of the Deans through delegated authority to ensure that records are maintained of identified chemical risks and hazards.

Monitoring and Health Surveillance

Monitoring of exposure to hazardous substances and health surveillance will be carried out as defined by University Policy.

Emergency Preparedness

All members of the University shall comply with University policy and procedures outlined in 'Emergency Evacuation Procedures Manual' in particular 'Hazardous Substance Spillage'.

Information, Instruction and Training

- a) All staff and students who handle chemicals must be provided with appropriate, information, training and instruction relating to chemical management procedures and health and safety requirements.
- b) Before, or upon, the first occasion that a hazardous substance is to be used in the workplace information relating to the nature and health effects of that hazardous substance must be readily available to all employees and students who may be exposed to that substance.
- c) Records of instruction and training on safe chemical handling provided to employees and students must be kept.

Management Review

- a) The University of Auckland, Chemical Management System procedures should be reviewed and updated every two years by the Faculties and the Health & Safety Office.
- b) The performance of the Chemical Management System should be reviewed within laboratories annually as part of annual hazard reviews. An external monitoring overview is done by the Hazard Containment Manager on an ongoing basis.

Approved:

Vice-Chancellor