#### WHS OP035 Hazardous Chemical Facilities Procedure

## Section 1 - Overview

(1) The requirements for laboratories, workshops and facilities when working with chemicals are defined in Australian Standards. If a new laboratory/studio/workshop is built, or the facility is upgraded for the purpose of working with hazardous chemicals, it must be brought into compliance with AS/NZS 2982 and the AS/NZS 2243 series, including:

- a. Construction, including fixtures;
- b. Services (e.g. plumbing, gas, electrical, ventilation);
- c. Health and safety requirements;
- d. Storage of hazardous substances; and
- e. Requirements for specialised work such as radiation, biological, animal etc.

# Section 2 - Scope

(2) This guide provides only an overview of relevant Standards. For specific construction reference refer to the AS/NZS 2982 and the AS/NZS 2243 series.

(3) Specific storage requirements are detailed in WHS OP028 Hazardous Chemical Storage Procedure.

## Section 3 - Procedure

(4) The facility must display signage at the entrance(s), stating the hazards and that the facility is restricted access.

(5) Consumption and storage of food and drink is prohibited within facilities where chemicals are used or stored.

(6) Hand washing facilities with hot and cold water must be provided inside each laboratory.

### **Construction Materials for Chemical Stores**

(7) Where a separate chemical storage facility is required, it should take account of the need for:

- a. Non-combustible construction materials;
- b. Construction materials that are not damaged by the goods being stored (e.g. Exposed steel and acids) and which do not add to the risk of the stored goods (e.g. zinc and copper with ammonium nitrate);
- c. Electrical equipment suitable for hazardous locations; and
- d. Pipes, valves and tanks designed to appropriate standards.

### **Atmospheric Monitoring**

(8) Atmospheric monitoring of the workplace may be required to determine the level of potential exposure to contaminants or to check that controls are working effectively.

(9) The measurements may involve sampling and subsequent analysis or may utilise a direct reading method. Direct reading instruments can be utilised for continuous monitoring and can be used to sound an alarm at a pre-set concentration.

(10) Monitoring may be made at a fixed location considered to be representative of the Workers breathing zone (static monitoring).

(11) A better measure of exposure to Workers and students is through the use of dosimetry where personal samplers (clipped to the workers clothing) are used to measure the exposure of workers over a shift. The sampling strategy has a major influence on the validity of the results obtained.

(12) The results of monitoring must be carefully compared with national Workplace Exposure Standards (WES). At levels that are a significantly close or over the WES, improved control should be considered.

(13) It is not acceptable to keep working without review, at levels at or near the WES.

#### Housekeeping

(14) Housekeeping standards for chemical storage areas must be maintained at a high level, in particular keeping areas free of combustible materials and promptly cleaning up any spilled materials.

(15) Some substances may require logs of use or to be stored in a locked safe, a higher level of authorised access will be required for these substances (e.g. scheduled drugs, cyanide etc.).

(16) Some substances may require special storage conditions and should be checked regularly e.g. potassium and sodium require storage under oil, perchloric acid requires storage under water.

### Authority and Compliance

(17) The Procedure Administrator, pursuant to the University's Work Health and Safety Rule, makes these procedures.

(18) University Representatives and Students must observe these Procedures in relation to University matters.

(19) These Procedures operate as and from the Effective Date.

(20) Previous Procedures relating to WHS OP013 (Interim) Hazardous Chemicals Procedure are replaced and have no further operation from the Effective Date of this new Procedure.

## **Section 4 - Definitions**

(21) Effective Date means takes effect on the day on which it is published or on such later day as may be specified in the procedure.

(22) Hazard means a situation or thing that has the potential to harm a person, property or the environment.

(23) Hazardous Chemical means any substance, mixture or article that satisfies the criteria for a hazard class in the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

(24) University Representative means a University employee (casual, fixed term and permanent) contractor, agent, appointee, UNE Council member, adjunct, visiting academic and any other person engaged by the University to undertake some activity for or on behalf of the University. It includes corporations and other bodies falling into one or more of these categories

(25) Student means an Admitted Student or an Enrolled Student, at the relevant time.

- a. Admitted student means a student who has been admitted to a UNE course of study and who is entitled to enrol in a unit of study or who has completed all of the units in the UNE course of study.
- b. Enrolled student means a student who is enrolled in a unit of study at UNE.
- (26) UNE Act means the University of New England Act 1993 No 68 (NSW).

(27) A Worker, as defined by the WHS Act, is a person that carries out work in any capacity for a person conducting a business or undertaking, including work as:

- a. An employee;
- b. A contractor or subcontractor;
- c. An employee of a contractor or subcontractor;
- d. An employee of a labour hire company who has been assigned to work in the person's business or undertaking;
- e. An outworker;
- f. An apprentice or trainee;
- g. A student gaining work experience;
- h. A volunteer; or
- i. Person of a prescribed class.