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SECTION 1 - INTRODUCTION

PURPOSE
Swinburne University of Technology is committed to providing a safe and healthy environment for its employees, students, contractors and public for work and study. This procedure sets out the process for identifying hazards / risks associated with the use of chemicals (including Hazardous Substances and Dangerous Goods), the implementation of appropriate control strategies and required steps to minimise the risk of adverse health effects and achieve regulatory compliance.

SCOPE
This procedure applies to the purchase, use, storage and disposal of chemicals university-wide.

This procedure covers chemicals only, such as hazardous substances, dangerous goods, scheduled poisons or controlled substances. It does not apply to biological, ionising radiation sources (Class 7 Dangerous Good), asbestos or explosives (Class 1 Dangerous Goods).

This procedure also applies to substances produced as by-products or waste products of work/study processes not involving Hazardous Substances or Dangerous Goods.

DEFINITIONS

<table>
<thead>
<tr>
<th>Word/Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Atmospheric monitoring</td>
<td>Taking measurements to estimate the level of airborne contaminants in the air inhaled by employees. Results are compared to exposure standards.</td>
</tr>
<tr>
<td>ChemAlert</td>
<td>Online chemical management system incorporating risk assessments, access to MSDS, stockholdings for chemical registers and manifest.</td>
</tr>
<tr>
<td>Chemical register</td>
<td></td>
</tr>
<tr>
<td>Chemical risk assessment</td>
<td>Risk assessment format specific to chemicals for identifying hazards, as defined in the OH&amp;S Regulations 2007 – Part 4.1 Hazardous Substances and Dangerous Goods (storage &amp; handling) Regulations.</td>
</tr>
<tr>
<td>Dangerous Goods (DG)</td>
<td>Substances classified on the basis of immediate risk to people, property and the environment from an incident, such as fire, explosion, corrosion, oxidation, spontaneous combustion and poisoning. Effects are mostly physiochemical in nature. Dangerous goods as defined in the Dangerous Goods Act 1985 and associated Regulations. Note: Dangerous goods can also be a hazardous substance and/or drug, poison or controlled substance.</td>
</tr>
</tbody>
</table>
| Drugs/Poisons/Controlled Substances | Drugs, poisons and controlled substances are defined in the Drugs, Poisons and Controlled Substances Regulations (2006). The defined substances that are controlled include:  
  - prescription medicines  
  - pharmacy-only medicines  
  - drugs of addiction  
  - many household, industrial and agricultural chemicals. The National Drugs and Poisons Schedule Committee classify drugs |

Please Note: Printing this document may make it obsolete. For the latest version of this policy always check the Policy and Procedures Directory
and poisons into schedules which are published as the *Standard for the Uniform Scheduling of Drugs and Poisons*. Toxicity is the main criterion for determining onto which schedule a substance is entered, and the schedule selected has implications for issues such as distribution, labelling, packaging, advertising and storage.

A drug, poison or controlled substance can also be a hazardous substance and/or a dangerous good.

<table>
<thead>
<tr>
<th>Exposure standard</th>
<th>Exposure standards are identified airborne concentrations of individual substances (in a person's breathing zone) which according to current knowledge should neither impair health nor cause undue discomfort to nearly all workers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard</td>
<td>Condition or situation, which has the potential to cause injury or illness (physical or psychological) to persons or damage to property and the environment.</td>
</tr>
<tr>
<td>Hazardous Substance (HS)</td>
<td>A substance that has the potential to harm health. Health effects may be short term (acute) or long term (chronic). Hazardous Substances are listed in the Hazardous Substances Information System (HSIS) published on the Safe Work Australia internet site (if already identified) or may be classified as such in accordance with the <em>Approved Criteria for Classifying Hazardous Substances</em> (NOHSC:1008:2004 3rd Edition) and/or the <em>National Exposure Standards for Atmospheric Contaminants in the Occupational Environment</em> (NOHSC: 1003: 1995). Hazardous substances are classified on basis of health effects only - Hazardous Substances Regulations apply. Many hazardous substances are also Dangerous Goods – both sets of legislation apply.</td>
</tr>
<tr>
<td>Head of Management Unit</td>
<td>A person with manager / supervisory responsibility that is recognised within the approved organisational structure of the divisions within Swinburne University of Technology, and includes those with delegated responsibility for staff and resources.</td>
</tr>
<tr>
<td>Health &amp; Safety Representative (HSR)</td>
<td>An elected member of a designated work group who holds office in accordance with the provisions of the OH&amp;S Act 2004.</td>
</tr>
<tr>
<td>Health Surveillance</td>
<td>Assessing whether a persons’ health is being affected by exposure. Includes biological monitoring – testing blood, urine or exhaled air to see how much of a substance has actually entered a person’s body.</td>
</tr>
<tr>
<td>Hierarchy of Control</td>
<td>The Hierarchy of Control is the preferred priority for risk control, emphasising hazard elimination and, where this is not possible, risk minimisation and other consideration:</td>
</tr>
<tr>
<td></td>
<td>- elimination of hazard</td>
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<td></td>
<td>- substitution of hazardous processes or materials with safer ones</td>
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<tr>
<td></td>
<td>- isolation of the hazard</td>
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<tr>
<td></td>
<td>- engineering controls</td>
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<tr>
<td></td>
<td>- administrative controls</td>
</tr>
<tr>
<td></td>
<td>- personal protective clothing &amp; equipment</td>
</tr>
<tr>
<td>Manager</td>
<td>For the purposes of this procedure ‘manager’ is any person who supervises or controls the work / study of either staff and / or students.</td>
</tr>
</tbody>
</table>
| Manager includes: | • managers  
• supervisors  
• team Leaders  
• academics / researchers  
• teachers  
• laboratory / workshop managers |
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<tbody>
<tr>
<td><strong>Manifest</strong></td>
<td>An inventory of dangerous goods stored within a particular building, site or specific location</td>
</tr>
<tr>
<td><strong>Material Safety Data Sheet (MSDS)</strong></td>
<td>A Material Safety Data Sheet is a document prepared by the manufacturer or importer of a chemical which describes uses, chemical and physical properties, health hazard information, precautions for use, safe handling and emergency information. It is a legislative requirement for the manufacturer or importer to supply a copy of the MSDS for each chemical to the end user.</td>
</tr>
<tr>
<td><strong>Near Miss</strong></td>
<td>An incident / event which had the potential to cause injury or damage to equipment, machinery, property, facilities.</td>
</tr>
<tr>
<td><strong>OH&amp;S risk register</strong></td>
<td>A register of identified activities, operations and task with perceived risk to persons, property or operations, that may involve, but is not limited to biohazards, chemicals, contractor works, manual handling, plant &amp; equipment, processes, university events, violence etc.</td>
</tr>
</tbody>
</table>
| **Reasonably practicable** | Means having regard to:  
• the severity of the hazard or risk in question;  
• the state of knowledge about that hazard or risk and any ways of removing or mitigating it;  
• the availability and suitability of ways to remove or mitigate that hazard or risk; and  
• The cost of removing or mitigating that hazard or risk. |
| **Risk** | How severely can someone be harmed by the hazard, and how likely it is that a person will be harmed. |
| **Risk assessment** | A general OH&S industry term to cover a number of risk assessment formats for identifying hazards, associated risk and implementation of suitable controls:  
• *Standard Risk Assessment*  
• *Job Safety Analysis (JSA)*  
• *Plant Risk Assessments*  
• *Manual Handling Risk Assessment*  
• *Chemical Risk Assessment* |
| **Risk phrase** | Hazards of a substance as described in the Hazardous Substances Information System (HSIS) (Safe Work Australia) |
| **Safe Operating** | A form of administrative control (training & instruction) that may come... |
| **Procedure (SOP)** (A4 version) (A3 version) | out of any of the risk assessment formats above |
| **Safe Operating Procedure Student Staff Record** | An individual record for recording of training in specific SOPs activities, task or operations for students and staff |
| **Safety phrase** | Precautions to be taken for the safe use of the substance as described in the Hazardous Substances Information System (HSIS) (Safe Work Australia) |

### LEGISLATIVE CONTEXT

<table>
<thead>
<tr>
<th><strong>Name</strong></th>
<th><strong>Location</strong></th>
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</table>
RESPONSIBILITIES

Responsibilities

Heads of Management Units shall:

- Implement this procedure in areas under their control including activities conducted on sites other than university property.
- Ensure chemical use is identified and recorded as a hazard in the business unit OH&S risk register, prioritising according to risk level.
- Ensure the business unit OH&S risk register, is reviewed quarterly, actions recorded are completed and the register updated.
- Ensure systems are in place to identify all dangerous goods and hazardous substances purchased, used, stored and produced in their areas.
- Ensure that risks associated with the use, storage, production and disposal of dangerous goods and hazardous substances are identified, assessed and controlled as far as is reasonably practicable.
- Ensure a master copy of the Faculty / School / Department chemical register is maintained in the ChemAlert database.
- Ensure only chemical risk assessment formats identified in this procedure are used (specifically through the online ChemAlert system).
- Ensure, as far as is reasonably practicable, that adequate financial provision is made available to implement corrective / preventive actions identified from risk assessments.
- Ensure that accurate records and information relating to the use, storage, production and disposal of dangerous goods and hazardous substances are maintained for areas under their control (specifically through the online ChemAlert system).
- Ensure that managers who oversee work or study activities that involve the supply, use, manufacture and storage of chemicals/hazardous substances are adequately trained and informed to ensure that the staff / students they supervise can perform their work safely.

Managers shall:

- Ensure that local procedures are developed in response to this procedure and that these are followed by staff and students.
- Ensure that all staff and students are aware of their responsibilities under this procedure and that all staff and students who use, handle or are likely to be exposed to chemicals are appropriately trained in such, including the Chemical Risk Assessment and SOPs.
- Ensure that Manufacturers Material Safety Data Sheets (MSDS) are obtained for all chemicals prior to purchase.
- Determine through review of the MSDS’s if chemicals are either or both a hazardous substances and/or dangerous goods
- Ensure that Chemical Risk Assessment are undertaken on all hazardous substances, dangerous goods and poisons in the storage, handling and use of such prior to purchase including consideration for:
- Spill kits
- Safety showers
- Bunding
- Waste disposal
- Personal Protective Equipment (PPE)

- Ensure the business unit OH&S risk register is maintained and actions recorded are completed.
- Ensure SOP’s are developed by suitably qualified persons where required for task involving chemicals.
- Ensure Safe Operating Procedure Student Staff Record is maintained.
- Consult with Health and Safety Representatives when assessing and controlling risks arising from the use of all chemicals (in particular HS, DG and Poisons).
- Ensure risk controls are reviewed and where necessary revised whenever chemical usage tasks change, on report of an incident/hazard/injury or on request by a health & safety representative.
- Ensure through the online ChemAlert system, that a current and accurate chemical register is maintained for Hazardous Substances/Dangerous Goods and Drugs/Poisons/Controlled Substances.
- Ensure that hard copy chemical risk assessments are available and accessible to users for any chemicals used or stored in their area.
- Ensure that hard copy, current Material Safety Data Sheets (MSDS) are available and accessible to users for any chemicals used or stored in their area.
- Ensure that all chemicals purchased, stored or decanted are clearly labeled as to provide sufficient information as identified in the relevant regulations.
- Ensure that exposure standards are not exceeded, and atmospheric monitoring and health surveillance is carried out where required.
- Ensure that all chemicals in their management unit are stored in appropriate facilities having regard to any storage incompatibilities.
- Ensure that any Dangerous Goods which exceed the ‘Manifest Quantity’ specified in Dangerous Goods (Storage and Handling) Interim Regulations 2011 Schedule 2 are included in the Manifest of Dangerous Goods for that building.
- Ensure that where quantities of Dangerous Goods exceed the ‘Placard Quantity’ specified in Goods (Storage and Handling) Interim Regulations 2011 Schedule 2 appropriate placarding is in place.

Staff and students shall:

- Take reasonable care for their own health & safety, and for the health & safety of anyone else who may be affected by their acts or omissions in the work / study environment.
- Not undertake use of or handle chemicals until appropriately trained and authorised to do so.
- Follow local arrangements / SOPs developed under this procedure for the use of
any chemicals and any other additional requirements set out by their department or manager.

- Report any hazards, incidents/near misses or injuries/illnesses associated with the use of chemicals as soon as they become aware of these.
- Use all equipment (including Personal Protective Clothing & Equipment) as instructed when using or handling chemicals
- Complete the required training in use of chemicals; and
- Not take any shortcuts that could increase the risks associated with the use of chemicals as part of their work/study activities.

The OH&S Consultants shall:

- Provide assistance and advice to Heads of Management units, managers and staff in the application of this procedure where requested.
- Assist work areas where required with the process of assessing and controlling workplace hazards/risks associated with the use of chemicals within the university.
- Monitor the status of chemical registers.
- Maintain records in relation to atmospheric monitoring and health surveillance associated with chemical usage at the university.
- Monitor and review conformance with the requirements of this procedure.
- Regularly evaluate the effectiveness of this procedure and review as required in line with operational and legislative requirements.

Facilities & Services Group shall:

- Coordinate the compilation of a Dangerous Goods Manifest for all Swinburne buildings which are used for storage of Dangerous Goods which exceed the quantities specified in Schedule 2 of the Dangerous Goods (Storage and Handling) Interim Regulations 2011
- Ensure that an Emergency Plan is in place for dealing with any emergency associated with the storage and handling of dangerous goods on each campus.
- Ensure that relevant information related to dangerous goods (see Manifest) stored/used on site is stored in an appropriate location and can be accessed by emergency services as required.

### SECTION 2 - PROCEDURE

**PROCEDURE**

<table>
<thead>
<tr>
<th>Procedure steps</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Purchasing and Supply of chemicals</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 All chemicals shall be assessed for risk prior to being purchased.</td>
<td>Manager</td>
</tr>
</tbody>
</table>
1.2 Manufacturers and suppliers are required to provide a Material Safety Data Sheets (MSDS) for any chemicals they supply. The manufacturer’s or supplier’s MSDS must be obtained for all chemicals as part of the risk assessment prior to use.

MSDS’s can also be obtained through ChemAlert.

1.4 Risk assessment is to be undertaken using a documented approach through ChemAlert. Such assessment is to be undertaken in consultation with the relevant employees and/or the Health & Safety Representatives (HSRs).

As a minimum the risk assessment must include:
- Review of the manufacturer’s or supplier’s Material Safety Data Sheets (MSDS)
- Identification of whether the chemical is classed as a Hazardous Substance (HS), Dangerous Good (DG), Schedule 1 or 2 Carcinogen or Drug/Poison/Controlled Substance
- Whether it is practicable to use a chemical with a lower hazard level (i.e. not a DG or HS)
- The risk level associated with the purchasing, storage, use and disposal of the substance
- Facilities/resources required for safe storage, use and disposal of the chemical
- Controls to be implemented prior to use of the chemical in the workplace
- Health risks to staff and students arising from operations involving the use of the chemical
- Additional requirements such as health monitoring

Where access to ChemAlert is not available, contact the Human Resources OH&S department.

1.5 All management units are to maintain and store a hard copy of their chemical risk assessments relevant to the particular workplace in each work location.

1.6 Any new chemicals must be added to the ‘Chemical Register’ for the area before use – refer 2. below.

1.7 The manager must ensure that the necessary controls are in place prior to the chemical being used in the work area.

2. Chemical Register

2.1 Each work site is required to establish and maintain a Chemical Register for all chemicals used – including Dangerous Goods (DGs) and Hazardous Substances (HS) and Drugs/Poisons/Controlled Substances.

The Chemical Register is to be established using ChemAlert

The Chemical Database (ChemAlert) must be kept up-to-date as each new chemical is purchased or chemicals are removed from use.

2.2 A master copy of the Faculty / School / Department chemical register is to be maintained in the ChemAlert database.
2.4 All management units are to store a hard copy of their Chemical Register relevant to the particular workplace in each work location where such chemicals are present, with copies of the relevant MSDSs, chemical risk assessments and if applicable any licences for the use of Schedule 1 or Schedule 2 Carcinogens.

Manager

2.3 The location of the Chemical Register is to be communicated to all staff and any other persons who use or could be potentially exposed to these substances.

Information

<table>
<thead>
<tr>
<th>3.</th>
<th>Material Safety Data Sheets (MSDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 The MSDS provides information about a material or chemical product. It contains information on the properties and potential hazards of the material, how to use it safely, and what to do if there is an emergency. Manufacturers and importers are responsible for determining whether a product they supply to a workplace is hazardous or dangerous (hazardous substance or dangerous goods).</td>
<td>Information</td>
</tr>
</tbody>
</table>

3.2 The minimum information that an MSDS must contain is:
- Product name;
- Manufacturer or importing supplier details (name, address, telephone) including an Australian emergency telephone contact number;
- Date of preparation or last review of the MSDS;
- Statement that the substance is a hazardous substance;
- Hazard classification of the substance (HSIS, Approved Criteria for Classifying Hazardous Substances);
- Dangerous Goods classification;
- Risk Phrase and Safety Phrase for the substance;
- Chemical names for ingredients (or generic name where this is commercially confidential) and physical properties of the substance;
- Proportion (or proportion ranges of the ingredients in the substance);
- First aid information;
- Emergency Information;
- Precautions for safe use, storage and disposal;
- Exposure standards; and
- Information on the health effects of the substance/ingredients

3.3 A current copy (less than five years old) of each MSDS is to be available for all Hazardous Substances (HS), Dangerous Goods (DGs) or Drugs/Poisons/Controlled Substances in the work area.

Manager

3.4 MSDSs must contain the original information from the supplier; any alterations are only to be additional material to the original MSDS.

Manager

3.5 MSDS are to be accessible to all persons who may be affected by the HS, DG or Poisons. MSDSs must be accessible to staff/students working outside core business hours

Manager

4. Labelling
4.1 All chemicals supplied to the workplace must be labelled with the manufacturer’s or the importing supplier’s label.  

4.2 The label of the container in which the chemical is supplied must remain legible and not be removed, defaced or altered.  

4.3 If a chemical is decanted from the supplier’s container, the decanted container must be clearly labelled with the product name of the substance.  

   If it is not practical to label the decanted container with the product name or substance then some other means must be established for identifying the substance (for example laminated label attached by cable tie).  

   The decanted container must remain labelled until the container is cleaned, neutralised, cured or chemically deactivated to the extent that it is not a risk to health.  

   The option to print labels for decanted substances is available through the ChemAlert database.  

   A label is not required where the decanted substance is to be used immediately (and not left unattended for any period of time) and the container is immediately cleaned, neutralised, cured or chemically deactivated to the extent that it is not a risk to health. Any remaining substance must be stored &/or disposed of according to laboratory procedures and legislative requirements.  

4.4 Any HS, DG or Poisons contained in a pipe, piping system, process vessel, reactor vessel or any plant that forms part of a manufacturing process must be clearly identified to any parties likely to be exposed to the chemicals.  

4.5 Any containers of waste produced or generated from chemicals (in particular HS, DG and Poisons) in the work area must be identified.  

5. Managing risks associated with the use of chemicals  

5.1 Managers must identify the hazards associated with the storage, use and handling of chemicals (in particular HS, DG and Poisons) in their workplaces through the undertaking of a risk assessment. Any risk assessment undertaken must be documented and recorded. The risk assessment is to be undertaken using a documented approach through the ChemAlert.  

5.2 Chemical risk assessments can be generic or individual.  

   Generic chemical risk assessments can be used for a group of chemicals that have similar properties and hazards, which will be used under the same circumstances or processes and therefore will require the same methods of control. For example acrylic based paints could be covered under a generic chemical risk assessment, with paints containing isocyanate under a separate generic chemical risk assessment.  

   The generic chemical risk assessment would be based on the highest levels of risk of the group of substances, and the controls would also apply to the processes or group of chemicals as a whole.
The Manager is responsible for ensuring a generic chemical risk assessment is appropriate and all risks have been taken into account for each activity.

Individual chemical risk assessments are required where the chemicals have unique risks, require unique controls and/or are used in a manner other than the intended purpose of the manufacturer or supplier.

5.3 The Hierarchy of Control must be applied when determining the most appropriate methods for controlling risks associated with chemical use. The control options at the top of the hierarchy are most effective; they do not require further management once they are implemented. The further down the hierarchy of controls, the more ongoing management and effort is required in maintaining control over the hazard.

Generally a combination of controls will be required.

<table>
<thead>
<tr>
<th>HIERARCHY OF CONTROLS</th>
<th>Start at the top and work down</th>
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<tbody>
<tr>
<td><strong>Most Effective Control</strong></td>
<td>Elimination E.g. Discontinue use of product,</td>
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<tr>
<td></td>
<td>Substitution E.g. Replace with a similar item that does the same job but with no or a lower hazard level</td>
</tr>
<tr>
<td></td>
<td>Isolation E.g. Put a barrier between the person and the hazard</td>
</tr>
<tr>
<td></td>
<td>Engineering controls E.g. Change the process, equipment or tools so the risk is reduced</td>
</tr>
<tr>
<td></td>
<td>Administration controls E.g. Guidelines, procedures, rosters, training etc to minimise the risk</td>
</tr>
<tr>
<td><strong>Least Effective Control</strong></td>
<td>Personal protective equipment E.g. Equipment worn to provide a temporary barrier</td>
</tr>
</tbody>
</table>

**Elimination**
Ask why the hazardous substance / dangerous goods is used. Can the work/study activity be changed to eliminate the use of chemicals? For example:
- Use a physical process rather than a chemical process to clean – ultra-sound instead of solvent.
- Using a physical fastening system instead of a solvent based adhesive.

**Substitution**
Use a less hazardous substances or dangerous goods. For example:
- Use a safer product (water based paint instead of oil based paint)
- Use a safer form of the product (pellets instead of powders) or a less concentrated form

**Isolation**
Separate people from the process by distance or barriers to prevent or reduce exposure. For example:
the use of glove boxes or glove bags
isolating operations in one room with restricted access or using appropriate barriers/screens to separate substances.
distancing staff/students from substances/processes through the use of remote controls

**Engineering**
Physical controls (such as plant/equipment) that eliminate or reduce substances being produced, stop or contain substances, or limit the area of contamination in the event of spills or leaks. For example:
- local exhaust ventilation to trap airborne contaminants close to point of release
- fume cupboards
- enclosed automated machinery to reduce exposure (e.g. automated spray booth)

**Administrative controls**
Systems of work or safe work practices which reduce employee exposure to chemicals. For example:
- Restricting access to certain areas at certain times.
- Good housekeeping including regular cleaning of work areas.
- Changing purchasing procedures so substances are supplied in ready to use containers and decanting is not required.

**Personal protective clothing and equipment (PPE)**
PPE includes overalls, aprons, footwear, gloves, chemical resistant glasses, face shields and respirators.

PPE should not be the sole means of controlling the risk as it relies on staff/students to follow instructions and procedures correctly.

Where PPE is used as a control measure the manager must ensure that:
- PPE is properly selected to the task
- PPE is readily available, clean and functional
- Staff/students have been trained to fit and use the equipment properly

<table>
<thead>
<tr>
<th>5.4</th>
<th>Outcomes of risk assessments must be documented</th>
<th>Manager</th>
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<tr>
<td></td>
<td>Where it is not <em>reasonably practicable</em> to control the risks at top of the hierarchy (Refer 5.3), this should be reflected in the risk assessment.</td>
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</tbody>
</table>

| 5.5 | The chemical risk assessment must be kept in a location (hard copy) where users of the chemical can readily access the information | Manager |

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<thead>
<tr>
<th>5.6</th>
<th>The risk assessment (including measures implemented to control risks) must be reviewed, and if necessary revised:</th>
<th>Manager</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>before any alteration is made to systems of work which are likely to result in changes to the risks associated with use of the chemical in the workplace</td>
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<td></td>
<td>if monitoring (environmental or health surveillance) indicates that controls are not adequate</td>
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<td></td>
<td>following accidents or near misses involving chemical use</td>
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<td>if new information on hazards for the use of the chemical becomes available</td>
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<td>before chemicals are moved to a new location</td>
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<td>if improved control measures become available</td>
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<td>at intervals not exceeding five years</td>
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<td>if requested by the Designated Health &amp; Safety Representative (HSR)</td>
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<tr>
<td>6</td>
<td>Exposure standards, monitoring and health surveillance</td>
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</table>
| **6.1** | Managers must ensure that employees or any other persons in the vicinity of the workplace (i.e. students, cleaners, laboratory staff, contractors, visitors, supervisors/managers or office workers) are not exposed to an atmospheric concentration of a Hazardous Substance or Dangerous Goods used or generated at the workplace **above** the exposure standard.  

Exposure standard information is listed on the MSDS and is required to be considered as part of the Risk Assessment.  

If an exposure standard is stated for the Hazardous Substance or Dangerous Goods this must be recorded on the Chemical Register. |
| Managers |
| **6.2** | If there is an exposure standard for a Hazardous Substance or Dangerous Goods supplied or generated at the workplace and:  
- there is uncertainty (based on reasonable grounds) as to whether the exposure standard is or may be exceeded; or  
- atmospheric monitoring is necessary to determine whether there is a risk to health;  

Then the manager must ensure that atmospheric monitoring is carried out.  

The exception to this is if health surveillance is required for that specific Hazardous Substance under Part 4.1 - OH&S Regulations 2007 and that health surveillance includes biological monitoring. |
| Managers |
| **6.3** | The OH&S Consultant, Human Resources is to be notified if atmospheric monitoring or health surveillance is required.  

Notes:  
- all costs associated with atmospheric monitoring, health surveillance, consulting services, licensing requirements and other specialised requirements in reference to the compliance with Part 4.1 - OH&S Regulations 2007 will be borne by the Management Unit where the Hazardous Substance is in use  
- health surveillance and air monitoring should not be used instead of safety measures |
| Manager |
| **6.4** | The results of any atmospheric monitoring at the workplace must be provided as soon as is reasonably practicable to any employee who has been, or who may have been exposed to the Hazardous Substance that is the subject of the atmospheric monitoring. |
| Manager |
| **6.5** | Health surveillance must be provided for any employee who is exposed to any Hazardous Substance:  
- listed in column 1 of Schedule 3 to the National Model Regulation for the Control of Workplace Hazardous Substances; or  
- determined by the Victorian WorkCover Authority to be a Hazardous Substance for which health surveillance is required and the exposure of the employee to the substance at the workplace is likely to have an adverse effect on the employees health.  

The purpose of health surveillance is to monitor the employee’s health for the purpose of identifying changes in the employee’s health status.  

Under the current National Model Regulations for Control of Workplace Hazardous Substances the following substances require health surveillance: |
• acrylonitrile
• inorganic arsenic
• asbestos
• benzene
• cadmium
• inorganic chromium
• inorganic lead
• creosote
• isocyanates
• inorganic mercury
• 4,4'-methylene bis (2-chloroaniline) (MOCA)
• organophosphate pesticides
• pentachlorophenol
• polycyclic aromatic hydrocarbons (PAH)
• crystalline silica
• thallium
• vinyl chloride

As at August 2012

6.6 Health surveillance must be performed under the supervision of a registered medical practitioner. A report prepared by that registered medical practitioner is to be provided.

The report must specify:

• any indications of adverse health effects that may be attributed to the Hazardous Substance; and

• any recommendations for measures to be taken by the employer to ensure the employees is not exposed to the substance for a specified period of time; and

• interpretation of the results of the health surveillance including whether the employee should continue working with the Hazardous Substance.

Manager

6.7 If a report is received from a medical practitioner which makes recommendations in relation to measures to be taken by the employer to ensure the employee is not exposed to the substance for a specified period of time – the OH&S Consultant, Human Resources is to be notified.

The OH&S Consultant, Human Resources will provide a copy of the health surveillance report to the Victorian WorkCover Authority.

Manager

OH&S Consultant

6.8 A copy of all atmospheric monitoring and health surveillance reports must be provided to the OH&S Consultant, Human Resources.

Manager

6.9 Records of results of atmospheric monitoring must be provided to and accessible to any employee who has been, or may be, exposed to the Hazardous Substance that is the subject of the atmospheric monitoring.

Manager

6.10 Records of results of atmospheric monitoring and health surveillance must be retained for a period determined by the Victorian WorkCover Authority or for 30 years if no period has been determined by the Authority.

Manager

OH&S Consultant / Manager

6.11 A copy of results of atmospheric monitoring and health surveillance must be forwarded to the HR OH&S consultants

Manager

7. Carcinogenic Substances
7.1 Carcinogenic substances are hazardous substances that can cause cancer. Two schedules of carcinogenic substances are restricted under part 4.2 of the Occupational Health and Safety Regulations 2007. Refer to WorkSafe Vic – Scheduled Carcinogens

7.2 Schedule 1 – Carcinogenic substances (as at August 2012)

The use of Schedule 1 carcinogenic substances is only permitted in laboratories after a license is obtained from WorkSafe Victoria. Use of these substances in workplaces other than laboratories is prohibited.

Schedule 1 carcinogenic substances are:

- 2-Acetylaminofluorene
- Aflatoxins
- 4-Aminodiphenyl
- Benzidine and its salts
- Bis(chloromethyl) ether
- Chloromethyl methyl ether (technical grade)
- 4-Dimethylaminoazobenzene
- 2-Naphthylamine and its salts
- 4-Nitrodiphenyl

7.3 Schedule 2 – Carcinogenic substances (as at August 2012)

The use of Schedule 2 carcinogenic substances is permitted in workplaces (not just laboratories) after a license is obtained from WorkSafe Victoria.

Schedule 2 carcinogenic substances are:

- Acrylonitrile
- Benzene – when used as a feedstock containing more than 50% benzene by volume
- 3,3'-Dichlorobenzidine and its salts
- Diethyl sulfate
- Dimethyl sulfate
- Ethylene dibromide – when used as a fumigant
- 4,4'-Methylene bis(2-chloroaniline)
- 2-Propiolactone
- o-Toluidine and o-Toluidine hydrochloride
- Vinyl chloride monomer

7.4 No Scheduled Carcinogens are to be used unless WorkSafe has been notified and the appropriate licences have been obtained.  

7.5 The original licences for the use of Schedule 1 or Schedule 2 Carcinogens must be kept with the Chemical Register for the area.

7.5 A copy of any licences for the use of Schedule 1 or Schedule 2 Carcinogens must be provided to the OH&S Consultant, Human Resources.

7.6 Access to scheduled carcinogens is restricted to staff or students who have:
- received chemical management training
- been trained and deemed competent on the hazards and risks associated with the use of the substance and any control measures to be implemented.
- met the above and are authorised by the manager

7.7 A record must be kept of any person (staff or students) who works with a scheduled carcinogenic substance. This record must include:
- Name
- Date of birth
- Residential address during the period of working with the scheduled carcinogenic substance
- Name of each scheduled carcinogenic substance worked with
- Period of time over which the person worked with each scheduled carcinogenic substance
- These records must be maintained for a period of 30 years from the last date that the person worked with the scheduled carcinogenic substance.

A copy of such record must be forwarded to the HR OH&S consultants

7.8 A written statement must be supplied to any person who has worked with scheduled carcinogens at the workplace – at the time that they cease work with Swinburne.

This statement must include:
- Name of each scheduled carcinogenic substance the person worked with
- Period of time over which the person worked with each scheduled carcinogenic substance
- How and where records in relation to their use of scheduled carcinogens may be obtained
- A statement advising the person to have periodical health assessments and the relevant tests for these assessments

A copy of such statement must be forwarded to the HR OH&S Consultants
8. **Drugs, Poisons & Controlled Substances**

8.1 The use of poisons is regulated through the *Drugs, Poisons and Controlled Substances Act 1981* and the *Drugs, Poisons and Controlled Substances Regulations 2006*.

This includes:

- Prescription medicines
- Pharmacy-only medicines
- Drugs of dependence
- Many household, industrial and agricultural chemicals

These ‘chemicals’ are ‘Scheduled’ according to their type, use and associated risks.

Drugs, poisons and controlled substances listed in the *Poisons Code* or in the *Standard for the Uniform Scheduling of Drugs and Poisons, Schedule 2, 3, 4, 5, 6, 7, 8 and 9 Poisons (Cth)* are divided into the following schedules. Please refer to these sources for the most current version of this information.

**Schedule 2**
Poisons for therapeutic use that should be available to the public only from pharmacists, or where there is no pharmacy service is available, from persons licenced to sell Schedule 2 poisons.

**Schedule 3**
Poisons for therapeutic use that are dangerous or are so liable to abuse as to warrant their availability to the public being restricted to supply by pharmacists or medical, dental or veterinary practitioners.

**Schedule 4**
Poisons that should, in the public interest, be restricted to medical, dental or veterinary prescription or supply, together with substances or preparations intended for therapeutic use, the safety or efficacy of which requires further evaluation.

**Schedule 5**
Poisons of a hazardous nature that must be readily available to the public but require caution in handling, storage and use.

**Schedule 6**
Poisons that must be available to the public but are of a more hazardous nature or poisonous nature than those classified in Schedule 5.

**Schedule 7**
Poisons which require special precautions in manufacture, handling, storage or use, or special individual regulations regarding labelling or availability.

**Schedule 8**
Poisons to which the restrictions recommended for drugs of dependence by the 1980 Australian Royal Commission of Inquiry into Drugs should apply.

**Schedule 9**
Poisons, which are drugs of abuse, the manufacture, possession, sale or use of which, should be prohibited by law except for amounts, which may be necessary for medical or scientific research conducted with the approval of Australian, state and/or territory health authorities.
8.2 No Scheduled Poisons are to be used until the appropriate Poisons Permit (Industrial and Educational Permit (Poisons Permit)) has been obtained from the Department of Health:

As part of this process the following must be completed:

- Formulation of a Poisons Control Plan
- Nomination of a 'Responsible Person' with an appropriate qualification and/or work experience.


8.3 Access to scheduled poisons must be restricted to staff or students who:

- Are authorised
- Work directly with the scheduled poison
- Have received chemical training
- Been fully briefed on the hazards and risks associated with the use of the substance and any control measures to be implemented
- Only the nominated 'responsible person' will be allowed to dispense the scheduled poisons
- Are the nominated 'Responsible Person', or
- Staff/students working directly under the control of the nominated 'Responsible Person'

8.4 Transaction records must be kept for the use of Schedule 4, 8 and 9 poisons. These must include records of supply, use and storage location, and records of disposal.

9. Dangerous Goods - Placarding

9.1 Chemicals which are classed as Dangerous Goods must be recorded as such on the Chemical Register – refer 2. above.


9.3 Where quantities of Dangerous Goods exceed these quantities placards are required as follows:

- Outer warning HAZCHEM signs at the entrances of the campus / building as appropriate
- Detailed signage on tanks and large storage units

9.4 Placards must comply with Schedule 4 Dangerous Goods (Storage and Handling) Interim Regulations 2011

10. Dangerous Goods - Manifest

10.1 Where quantities of Dangerous Goods exceed the 'Manifest Quantity' outlined in Schedule 2 of the Dangerous Goods (Storage and Handling) Interim Regulations
2011 a manifest must be prepared which lists all dangerous goods stored in the workplace.

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>10.2</strong></td>
<td>At Swinburne the Manifest will generally be prepared at the ‘Building’ level. This will require management units to provide an extract of their Chemical Register specific to Dangerous Goods to Facilities &amp; Services Group on a quarterly basis or when a new dangerous good exceeding the manifest quantity is introduced.</td>
</tr>
</tbody>
</table>
| **10.3** | The Manifest shall contain the following information:  
- General information such as the name of the occupier, address of the premises and the date the manifest was prepared or last revised.  
- Emergency contact details for at least two people to be contacted in the event of an incident.  
- Summary information about the classes of Dangerous Goods at the premises.  
- A plan of the premises. |
| **10.4** | The manifest is to be kept in the security office at each campus and the fire panel where present in each building. Local emergency services are to be informed as to the locations of manifests at each campus. |
| **10.5** | The manifest is to be kept up to date. It is to be checked as a minimum as part of the regular OH&S Worksite Inspection process and the Buildings & Grounds Audits. |
| **11.1** | A written plan for dealing with any emergency associated with the storage and handling of dangerous goods within each building is to be:  
- developed, implemented and maintained; and  
- communicated to persons engaged to work at the premises and who may be exposed to risk as a result of an emergency; and  
- communicated to persons in management and control of adjacent premises if persons or property on the adjacent premises may be exposed to risk as a result of an emergency. |
<p>| <strong>11.2</strong> | When developing or reviewing the emergency plan written advice must be sought from the emergency services authority and that advice must be considered. |
| <strong>11.3</strong> | The plan must clearly describe the location of the manifest (A COPY MUST BE KEPT NEXT TO THE FIRE EMERGENCY PANEL for emergency services to access), first aid requirements for dealing with the chemical used, spill kits and training requirements for emergency equipment such as breathing apparatus, emergency showers and eye wash facilities. |
| <strong>11.4</strong> | The plan must be reviewed if there is a change in circumstances or at least every five years. |
| <strong>12.1</strong> | Employees are to be provided with the skills and knowledge they need to perform their work in a manner that is safe and without risk to health. Persons who need information, instruction or training in relation to chemical usage include ongoing and contract employees, casual staff, students, contractors, and cleaners. |</p>
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<thead>
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<tbody>
<tr>
<td>12.2</td>
<td>Managers shall ensure, as part of the local induction in areas where chemicals are used all new staff and students undertake appropriate training.</td>
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<td>12.3</td>
<td>The level of information, instruction or training that is required depends on the level and nature of the (potential) exposure to chemicals. This would include:</td>
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<td>- Types of chemicals in use in the workplace</td>
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<td>- Location and use of MSDSs in the workplace</td>
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<td>- Labelling requirements, including for decanted substances</td>
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<td>- Safe use and handling procedures and practices for the substance or group of substances</td>
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<td>- Potential routes of entry and exposure to chemicals and symptoms of exposure</td>
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<td>- Risk controls in place at the workplace, and how they protect the employee against exposure</td>
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<tr>
<td></td>
<td>- Reasons why air monitoring or biological monitoring may be required, and how this will be executed within the work environment if required</td>
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<td></td>
<td>- Emergency procedures regarding emergencies that include chemicals</td>
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<td>- The need to forward a copy of the relevant MSDSs with a staff members if they are referred for medical attention after exposure</td>
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<td>- Safe clean-up of spills, and safe disposal of chemicals</td>
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<td></td>
<td>- Selection, fitting and use of Personal Protective Equipment, where it is in use to control exposure to chemicals</td>
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<td></td>
<td>- First aid requirements (this may be focused primarily on first aid personnel)</td>
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<tr>
<td>12.4</td>
<td>The content of such training is to be reviewed to ensure it remains current and covers all current / new hazards in the work place.</td>
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<tr>
<td>12.5</td>
<td>Records of the training and refresher training are to be maintained in the work place including date, outline and confirmed attendance at the training.</td>
</tr>
<tr>
<td>13.1</td>
<td>Development of Safe Operating Procedures when using chemicals should include:</td>
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<tr>
<td>13.2</td>
<td>Eating, drinking, shaving and the application of cosmetics is prohibited in laboratories.</td>
</tr>
<tr>
<td>13.3</td>
<td>Food and drink for consumption must not be stored in laboratories or laboratory refrigerators or freezers.</td>
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<tr>
<td>13.4</td>
<td>Long hair must be tied back.</td>
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<td>13.5</td>
<td>Protective clothing used whilst handling chemicals must not be used outside of the laboratory.</td>
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<tr>
<td>13.6</td>
<td>Hands to be washed immediately after using chemicals</td>
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<tr>
<td>13.7</td>
<td>Wearing suitable PPE such as eye/face protection, gloves, and other garments (overalls, laboratory coats)</td>
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<tr>
<td>13.8</td>
<td>Unwanted or excess chemicals shall be disposed of in accordance with the MSDS and relevant local legislation</td>
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</table>
**SUPPORTING DOCUMENTATION**

Forms and Records Management

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Document Type</th>
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<td>Retention Time</td>
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### Related Material

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<tr>
<th>Name</th>
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<tr>
<td>Guidance Note for the Assessment of Health Risks Arising from Hazardous Substances in the Workplace [NOHSC: 3017 (1994)]</td>
<td>Guidance Note for the Assessment of Health Risks Arising from Hazardous Substances in the Workplace</td>
<td>PDF</td>
</tr>
<tr>
<td>Adopted National Exposure Standards For Atmospheric Contaminants In The Occupational Environment [NOHSC: 1003 (1995)]</td>
<td>Adopted National Exposure Standards For Atmospheric Contaminants In The Occupational Environment</td>
<td>PDF</td>
</tr>
<tr>
<td>National Model Regulation for the Control of Scheduled Carcinogenic Substances [NOHSC: 1011 (1995)]</td>
<td>National Model Regulation for the Control of Scheduled Carcinogenic Substances</td>
<td>PDF</td>
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## SECTION 3 - GOVERNANCE

### RESPONSIBILITY

<table>
<thead>
<tr>
<th>Policy Owner</th>
<th>Director Human Resources</th>
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### VERSION CONTROL AND CHANGE HISTORY

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Approval Date</th>
<th>Approved by</th>
<th>Amendment</th>
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<tbody>
<tr>
<td>1</td>
<td>September 2013</td>
<td>Director Human Resources</td>
<td>Previously Chemical Management Procedure Draft, reviewed to incorporate:</td>
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<tr>
<td></td>
<td></td>
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<td>- OH&amp;S risk register for use by individual business units;</td>
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<td></td>
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<td>- specific standardised chemical risk assessment formats to be used for all SUT OH&amp;S risk assessments;</td>
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<td>- specific standardised risk assessments are undertaken for chemical management, to meet regulatory requirements;</td>
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<td>- standard industry terminology; and</td>
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<td></td>
<td></td>
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<td>- stakeholder ease of use</td>
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