

Guideline

Chemical Safety in the Workplace (WHS) Policy Guideline

Objective file number: 2015-06311

Policy developed by: For Official Use Only -12-A2
Workforce Health, Workforce
Approved at Portfolio Executive on: 21 October 2015

Next review due: 31 October 2018

Summary The Chemical Safety in the Workplace (WHS) Policy Guideline

provides guidance in the implementation of a systematic and consistent approach in the safe management and handling of

hazardous chemicals in the workplace.

The Policy Guideline has been developed as guidance in the safe use, storage and disposal of hazardous chemicals and also

applies to the storage and handling of dangerous goods, ensuring compliance with *Work Health and Safety Act 2012* (SA), its

regulations and codes of practice.

Keywords WHS, Work Health and Safety, Chemical, Hazardous, Dangerous Good,

Safety Data Sheets, SDS, Registers, Policy Guideline, Hazards, Risk Assessment, Storage, CAS, WHSIM, Chemical Safety in the Workplace

Policy Guideline

Policy history Is this a new policy? Y

Does this policy amend or update an existing policy? N

Does this policy replace an existing policy? N

If so, which policies? N/A

Applies to All SA Health Portfolio

Staff impact All Staff, Management, Admin, Students; Volunteers

EPAS Compatible NA

Registered with Divisional

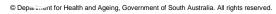
Yes

Policy Contact Officer

Policy doc. Reference No. G0152

Version control and change history

Version	Date from	Date to	Amendment
1.0	21 October 2015	Current	Original version







A.C. C.



Document control information

Document owner	Group Director, Workforce Directorate, System Performance and Service Delivery, SA Health
Contributors	Senior Strategy and Policy Consultant, Strategy Policy and Performance, Workforce Health Principal Strategy and Policy Consultant, Strategy Policy and Performance, Workforce Health Project Officer, Engineering Services, Business Support, SA Pathology
Document classification	For Official Use Only -I2-A2
Document location	SA Health internet – 'policies page' SA Health intranet only – 'policies page' (publishing exemption requested and approved by Portfolio Executive)
Reference	2015-06311
Valid from	21 October 2015
Review date	October 2018

Document history

Date	Version	Who approved New/Revised Version	Change reference	
21/10/2015	V.1	Portfolio Executive	PE Approved version.	

Endorsements

Date	Endorsed by
9/9/2015	Group Director, Workforce, System Performance and Service Delivery

Approvals

Date	Approved by
21/10/2015	Portfolio Executive

Contents Page

2.	·	4
۷.	Scope	4
3.	Principles	4
4.	Detail	5
5.	Roles and Responsibilities	19
6.	Reporting	21
7.	EPAS	21
8.	National Safety and Quality Health Service Standards	22
9.	Other	22
10.	Risk Management	22
11.	Evaluation	22
12.	Definitions	
13.	Associated Policy Directives / Policy Guidelines	25
14.	References, Resources and Related Documents	25
	c OR	
	DNAL-COP	
	COP I	
	AFORMAL.	
	AFORMAN.	
	AFORMAL COR	

Chemical Safety in the Workplace (WHS) Policy Guideline

1. Objective

SA Health is committed to and acknowledges its legislative responsibility for the provision of a safe work environment and the prevention of harm to all persons.

The policy guideline outlines the requirements defined by the *Work Health and Safety Act* 2012 (SA) and its regulations for all SA Health Local Health Networks (LHN)/Heath Service (HS)/Business Unit (BU) and Contractors (PCBU) to ensure the safe management and handling of chemicals in the workplace and that risk associated with chemicals are controlled.

This policy guideline also defines requirements associated for the safe use, storage and disposal of hazardous chemicals and also applies to the storage and handling of dangerous goods as defined in the *Work Health and Safety Act 2012* (SA) and its regulations

This policy guideline is to be read in conjunction with the <u>SA Health Policy Directive</u> <u>Hazard Identification and Risk Management (WHS)</u> and is prepared with reference to regulatory requirements set out in the *Work Health and Safety Regulations 2012* (SA) and the following Approved Codes of Practice:

- How to Manage Work Health and Safety Risks;
- Managing Risks of Hazardous Chemicals in the Workplace;
- Labelling of Workplace Hazardous Chemicals;
- Preparation of Safety Data Sheets for Hazardous Chemicals.

2. Scope

The policy guideline applies to all SA Health workers including occupiers, contractors, volunteers, labour hire personnel and students who use and/or have management or control of hazardous chemicals in the workplace.

3. Principles

SA Health will take reasonably practicable steps to develop and implement a systematic and consistent approach to hazard identification and risk management regarding workplace hazardous chemicals, including:

- The completion of a risk assessment prior to the purchasing of <u>new</u> hazardous chemicals. Reference may be made to <u>SA Health WHSIM Form – Chemical</u> <u>Safety - Risk Assessment;</u>
- The completion of a task risk assessment for activities involving the handling or use of hazardous chemicals. Reference may be made to <u>SA Health WHSIM Form</u> <u>- Chemical Safety -Task Risk Assessment (SWMS)</u>;

- The implementation of risk control measures to ensure hazardous chemicals do not pose a potential risk to any person, by eliminating, where reasonably practicable, or minimising associated risks using the hierarchy of controls (e.g. safe work procedures) and implementing corresponding training.
- The correct labelling of all hazardous chemicals. Reference may be made to <u>SA</u>
 Health WHSIM Factsheet Comparison of Hazard Pictograms with ADG Code
 Class Labels.
- The provision of appropriate information and training about the hazardous chemicals used at the workplace, including PPE requirements.
- Accessibility to current (prepared within the last 5 years) Safety Data Sheet (SDS) for hazardous chemicals for all workers using, storing or handling the chemical in the workplace;
- The documentation and maintenance of a hazardous chemical register listing all hazardous chemicals at the workplace with reviews to be conducted annually; Reference may be made to <u>SA Health WHSIM Register - Model Chemical Safety</u> <u>Register</u>;
- The display of placarding in the workplace, preparation and maintenance of a manifest and notification to the regulator (SafeWork SA) where specified quantities of certain hazardous chemicals used, handled or stored exceed threshold quantities. Reference may be made to SA Health WHSIM Factsheet Table of Schedule 11 Placard and Manifest Quantities and SA Health WHSIM Register Model Chemical Safety Manifest;
- The preparation and maintenance of emergency plans, including the provision of these plans to emergency services where manifest quantities are exceeded in the workplace.
- The investigation, action, and reporting in response to any instance of hazard or incident (including notifiable incident) involving hazardous chemicals, in addition to the prevention of recurrence via review of risk control measures;
- The consultation and communication with workers and their workgroup representatives regarding hazardous chemical hazard identification and risk management;
- The enablement of well-informed decisions to be made about the safe storage and disposal of chemicals;
- Secure storage arrangements for chemicals of security concern including record keeping of location, quantities and accessibility;
- The identification of hazardous chemicals that have licensing and/or authorisation requirements through the regulator (SafeWork SA) i.e. Cyclophosphamide.

4. Detail

4.1 Hazardous Chemicals

A hazardous chemical is a liquid, gas, material or vapour that has the potential to cause injury, illness or disease through either acute and/or chronic exposure.

In accordance with the WHS Regulations 2012 (SA), a hazardous chemical is any substance, mixture or article that satisfies the criteria of one or more Globally Harmonised System of Classification and Labelling of Chemicals (GHS) hazard classes, including a classification in Schedule 6 of the WHS Regulations.

4.2 Dangerous Goods

Dangerous goods are substances, mixtures or articles that, because of their physical, chemical (physicochemical) or acute toxicity properties, present an immediate hazard to people, property or the environment. Types of substances classified as dangerous goods include explosives, flammable liquids and gases, corrosives, chemically reactive or acutely (highly) toxic substances.

Most substances and mixtures that are defined as dangerous goods by the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) are hazardous chemicals, except those that have only radioactive hazards (class 7 dangerous goods), infectious substances (division 6.2) and most class 9 (miscellaneous) dangerous goods. The criteria used to determine whether substances are classified as dangerous goods are contained in the ADG Code which also contains a list of substances classified as dangerous goods.

For dangerous goods transport requirements reference must be made to the Dangerous Substances Act 1979 (SA), Dangerous Substances (Dangerous Goods Transport) Regulations 2008 (SA) and the Australian Dangerous Goods Code.

4.3 Identifying and Managing the Risks of Exposure

The Work Health and Safety Act 2012 (SA) and its Regulations requires SA Health LHN/HS/BUs and workplaces to identify any hazards and manage the risks to health and safety associated with the use, handling or storing of hazardous chemicals in the workplace.

Reference may be made to <u>SA Health Policy Directive – Hazard Identification and Risk Management (WHS)</u>.

LHN / HS / BU and WPs must ensure that a risk assessment is completed to cover each hazardous chemical prior to its purchase and for activities involving the handling or use of hazardous chemicals.

A pre-purchase risk assessment is not required if:

- Citation of the SDS determines the chemical to be non-hazardous;
- The hazardous chemical has have been previously purchased and a risk assessment has been completed.

When managing risks from chemicals, SA Health LHN/HS/BU and WPs must take into consideration the following factors:

- the hazardous properties of the chemical;
- potentially hazardous chemical and physical reactions between the chemical and another substance or mixture;

- the nature of the work to be carried out with the chemical;
- a structure, plant or system of work that:
 - is used in the handling, generation, storage or use of the chemical;
 - could interact with the chemical at the workplace.
- · Any incidents or injuries related to chemicals.

Reference may be made to the SafeWork Australia Code of Practice for Managing Risks of Hazardous Chemicals in the Workplace for further guidance.

Before completing the risk assessment the following should be considered:

- Establish the context of the assessment the context defines the parameters to be taken into account, the scope and the risk of impact on the business.
- Who should carry out the assessment for example a worker who has a practical understanding of the work task and the ability to interpret information such as chemical labels and Safety Data Sheets?

The risk assessment should be completed in consultation with Health and Safety Representatives (HSRs) and other relevant workers to ensure suitable risk control measures are identified and implemented.

Reference may be made to <u>SA Health WHSIM Form - Chemical Safety - Risk</u> <u>Assessment.</u>

<u>SA Health WHSIM Form - Chemical Safety - Task Risk Assessment (SWMS)</u>, or similar, should be completed for the management and mitigation of any risk associated with the handling and use of hazardous chemicals (may also be used for cytotoxic drugs and nanoparticles/material) in the workplace; this enables records of hazards identified and corrective actions to be documented in the WHS Risk Treatment Plan. Where hazards and associated risks are not known or do not have well-established and accepted control measures, a task risk assessment must be undertaken to determine the effective control measures to be implemented.

Appropriate risk control measures must be implemented using the hierarchy of controls. Where the inherent risk is unable to be eliminated, consideration of the following common examples of risk control measures for hazardous chemical risks at a workplace must be considered:

- determining whether the task can be completed by an alternative method;
- substitute the chemical for a less hazardous chemical, for example replacing organic solvents with water-based detergents;
- purchasing hazardous chemicals in a different form (e.g. powder form);
- Reduce the amount used, handled or stored;
- Isolate the source of exposure to the chemical;
- Use of engineering controls e.g. enclosure and ventilation systems, closed administration and transfer devices
- Training workers;
- Use of administrative controls e.g. developing Safe Work Procedure (SWP);
- Use of Personal Protective Equipment (PPE) e.g. gloves, eye protection, Fit tested respiratory masks (N95/P2).

Where the risk control measure include the development of procedures for the safe handling, storage and use of hazardous chemical, <u>SA Health WHSIM Template - Safe Work Procedure (SWP)</u> should be completed.

4.4 Safety Data Sheets (SDS)

A SDS is a document that provides detailed information about chemicals, including the information on the identity, ingredients and properties of the chemical product, the health hazards, physical hazards and environmental hazards, the workplace exposure standards for airborne contaminants, emergency procedures, first aid, disposal and transport. The SDS is an important information resource for workers when managing specific risks of a chemical and should be considered when training workers on how to use a chemical safely.

The information in a SDS is arranged under 16 headings to allow relevant information to be easily located by the person using the chemical.

In accordance with Chapter 7 of the WHS Regulation 2012 (SA), SA Health must ensure that a current SDS for hazardous chemicals is readily available to:

- Any worker involved in using, storing or handling the hazardous chemical in the workplace
- Any emergency service worker or anyone else who is likely to be exposed to hazardous chemicals at the workplace; and
- Any person at the workplace who is either likely to be affected by the chemical, or asks for access to the SDS.

A <u>copy</u> of a current SDS must be kept in the workplace where the hazardous chemical is used, handled or stored. The supplier of a hazardous chemicals to SA Heath workplaces must provide free of charge a hard copy of the manufacturer or importers current SDS on first supply or on request.

Safety Data Sheets may also be obtained via the online corporate databases available through the SA Health Library Services.

4.5 Hazardous Chemical Registers

SA Health LHN/HS/BU and WPs must ensure that a register of the hazardous chemicals used, handled or stored at the workplace is prepared, maintained and accessible in the workplace so that workers can find up-to-date information about those chemicals. The register must include a list of the product names of all hazardous chemicals and be accompanied by the current SDS for each of those products listed, the maximum quantities kept or stored, and where relevant risk assessment documentation.

Reference may be made to <u>SA Health WHSIM Register – Model Chemical Safety</u> Register for guidance.

The register and associated SDSs may be kept electronically provided all workers have access to the register however it is recommended that a hard copy register and associated SDSs is kept in a common location or where the hazardous chemicals are most likely used.

Registers must be reviewed and updated annually or upon the introduction of new chemicals into the workplace.

It is recommended that hazardous chemical registers are reviewed and compiled into a site register managed by relevant LHN/HS WHS business unit.

Where SA Health HS/BU and WPs that have more than one Person Conducting a Business or Undertaking (PCBU), e.g. contracted cleaning services, with access and/or a responsibility for maintaining a hazardous chemical register, workplaces are required to maintain a chemical register and have a current SDS for each hazardous chemical listed to ensure all workers have access to the information, e.g. in the event of a spillage or exposure to cytotoxic drugs. This requirement does not exempt SA Health from its obligation to provide information about hazardous chemicals to all workers, including contractors, volunteers and students.

Hazardous chemicals in-transit and consumer products are not required to be listed on the register. Hazardous chemicals are in-transit if they are not used in the workplace and are not kept at the workplace for more than five consecutive days, unless there is a frequent presence of the hazardous chemical or significant quantities in-transit at the workplace.

Consumer products are those that are packed primarily for use by a household consumer and are used in a manner consistent with normal household use. These products include hazardous chemicals used in an office, for example printer toner and whiteboard cleaners. These do not need to be included on the register.

Large quantities of consumer products used for commercial purposes, for example hand disinfectant gel, or hazardous chemicals not likely to be found in a household setting are not considered to be consumer products and must be included on the register.

4.6 Manifest and Placard Quantities

The WHS Regulations 2012 (SA) requires SA Health LHN/HS/BU and workplaces to ensure placarding is displayed in the workplace. Preparation and maintenance of a manifest is required, in addition to the notification to the Regulator (SafeWork SA) where specified quantities of certain hazardous chemicals that are dangerous goods are used, handled or stored at the workplace and exceed threshold quantities specified in Schedule 11.

Reference may be made to <u>SA Health WHSIM Factsheet - Placard and Manifest</u> Quantities.

A manifest is different to a register, and is intended primarily for emergency services personnel to use where they are required to respond to an emergency situation in the workplace. A manifest is required to contain additional information about hazardous chemicals in the workplace than in a register, including the hazard classes and categories of the hazardous chemicals, details of the type, size and locations of containers present at the workplace, the name and address of the workplace and contact telephone numbers in the event of an incident.

Reference may be made to <u>SA Health WHSIM Register – Model Chemical Safety Manifest (R011).</u>

4.7 Classification and Labelling

SA Health LHN/HS/BU and workplaces must ensure that all hazardous chemicals that are used, handled or stored at the workplace are correctly labelled. Labelling is to be carried out in accordance with the SafeWork Australia National Code of Practice: *Labelling of Workplace Hazardous Chemical*.

A label is a group of written, printed or graphical information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the container of a hazardous chemical.

The WHS Regulations 2012 (SA) has introduced an international system of chemical hazard classification, labelling and SDS requirements, based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

The GHS requirements specify that labels must contain information on the identity and proportions of the hazardous chemical and its constituents, ingredients or chemical formula, abbreviation and acronyms, structure or reactive components, hazard statements, precautionary statements to be followed during its use, handling and storage, pictograms or class label, signal term (DANGER or WARNING) and instructions for the safe disposal of the chemical.

Reference may be made to <u>SA Health WHSIM Factsheet - Comparison of GHS Hazard</u> Pictograms with ADG Code Class Labels.

Whilst the containers of hazardous chemicals from a supplier or manufacturer will be received appropriately labelled, the correct labelling is required for hazardous chemicals that are:

- Manufactured within SA Health sites:
- Decanted or transferred from the chemical's original container in the workplace to another container.

SDS and labelling requirements do not apply to in the following circumstances:

- therapeutic goods within the meaning of the Therapeutic Goods Act 1989 of the Commonwealth at the point of intentional intake by or administration to humans;
- veterinary chemical products within the meaning of the Agvet Code at the point of intentional administration to animal.

For example: a hazardous chemical, such as the cytotoxic drug, methotrexate (which is TGA approved and administered for therapeutic reasons) is exempt from the requirements at the point of intake; for example a SDS does not have to accompany the cytotoxic drug when it is being administered to a patient, nor does it have to have GHS labels when it is being administered to a patient but a SDS must be made available to all workers in the ward for reference should it be required.

Hazardous Chemical containers that are used for storing a hazardous chemical must be appropriate to contain the chemical and labelled for that intended purpose, for example a hazardous chemical must not be stored in a domestic drink container. If the contents of the container are unknown, the container must be clearly marked as 'unknown chemical' and isolated until its contents are identified and where applicable the container appropriately labelled as a hazardous chemical. If the contents of the container cannot be identified, they must be disposed of in accordance with relevant local Waste Management requirements.

4.8 Storage and Compatibility

SA Health LHN/HS/BU and WPs must refer to storage requirements of hazardous chemicals specified in the following Australian Standards:

• AS/NZS 1940:2004 - The storage and handling of flammable and combustible liquids;

- AS/NZS 2243.10:2004 Safety in laboratories Part 10: Storage of chemicals;
- AS/NZS 3780:2008 The storage and handling of corrosive substances;
- AS/NZS 3833:2007 The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers;
- AS/NZS 4332:2004 The storage and handling of gases in cylinders.

When planning to store hazardous chemicals, LHN/HS/BU and WPs must consider storage compatibility of the chemicals. Hazardous chemicals and dangerous goods may need to be isolated or separated by sufficient distance to eliminate the risk of fire, explosion, or accumulation of toxic gases or vapours from a leak or spillage.

The principal source of guidance on conditions for safe storage and compatibility is located in the SDS.

4.9 Purchase of hazardous chemicals

Prior to purchasing a hazardous chemical consideration should be given to following:

- Has the chemical been purchased before?
- Is the SDS available?
- Is the chemical deemed a hazardous chemical?
- The possibility of substituting a hazardous chemical for another with less risk in accordance with the hierarchy of controls. The quantity purchased should be kept to a minimum to reduce the risk of a chemical spill.
- Does the hazardous chemical require a license, special approvals or registration with the Regulator?
- Whether the hazardous chemical has specific storage requirements (e.g. chemical
 of security concern, compatibility with other chemicals) and can it be stored
 appropriately once purchased.
- Handling and use of the hazardous chemical requires PPE that is supplied and/or in stock:
- Can the hazardous chemical be disposed of under current waste management processes?

On <u>first</u> purchase of a hazardous chemical completion of a risk assessment must be conducted <u>SA Health WHSIM Form – Chemical Safety Risk Assessment</u> and an SDS must be obtained from the supplier prior to its use. Once the hazardous chemical has been received from the supplier the chemical register and/or Manifest must be updated.

The use, handling or storage of prohibited or restricted carcinogens, unless for genuine research or analysis, is prohibited unless authorisation is obtained from the Regulator (SafeWork SA) prior to purchasing, i.e. the cytotoxic drug cyclophosphamide is a restricted carcinogen and requires authorisation*.

Reference may be made to the Safe Handling- Cytotoxic drugs and related waste – a risk management guide for South Australian Health Services for further guidance in the safe handling of cytotoxic drugs and to <u>SA Health WHSIM Factsheet - Table of Prohibited</u> carcinogens and Restricted Hazardous Chemicals for chemicals requiring authorisation.

If authorisation is granted by the Regulator, SA Health must comply with strict conditions in relation to reporting changes at the workplace that may affect the authorisation i.e. the number of workers at risk of potential exposure, the quantity of use by a LHN.

The person authorised to use, handle or store prohibited or restricted carcinogens must keep the following records for 30 years after the authorisation ends:

- · A copy of the authorisation including any conditions imposed; and
- The full name, date of birth and address of any worker likely to be exposed during the period of the authorisation.

4.10 Chemicals of Security Concern

The *National Code of Practice for Chemicals of Security Concern* applies to 11 precursor chemicals and 84 toxic chemicals of security concern.

SA Health is committed to the implementation of this code and recommends LHN/HS/BU and WPs apply the code where appropriate if any of the chemicals of security concern are handled, used or stored.

This includes ensuring that:

- Suspicious activity is reported to Australian Government National Security Hotline on 1800 1234 00;
- Incidents of theft or misuse of chemicals of security concern are reported to LHN/HS/BU Security;
- Arrangements are in place for secure storage of chemicals of security concern including record keeping of location and quantities; i.e. inventory,
- Implementation of authorisation protocols are in place for purchasing chemicals of security concern and monitoring order variations;
- Chemicals of security concern risk in the workplace are reviewed on a quarterly basis ensuring risk controls are in place based on the level of risk.

<u>SA Health WHSIM Factsheet</u> <u>Chemicals of Security Concern Table</u> provides details of the relevant chemicals and their concentrations.

4.11 Security Sensitive Ammonium Nitrate (SSAN)

Specific regulatory requirements in South Australia apply to security sensitive ammonium nitrate (SSAN). In accordance with these requirements all purchasing, storage, use or disposal of SSAN by SA Health workplaces must ensure the following actions:

- ensure licensing requirements are sought and maintained, as relevant
- record each date of purchase, use or disposal and quantity of SSAN;
- keep each record for a period of at least 5 years;
- make the records available to a SafeWork SA inspector on request within 14 days;
- report immediately any loss or theft of SSAN to the Regulator (SafeWork SA) and South Australia Police (SAPOL);
- implement local protocols to ensure that quantities of SSAN are kept in a secure manner.

4.12 Asbestos Containing Materials (ACM)

Asbestos is a generic name that is given to a group of six fibrous silicate materials that occur naturally in the environment that were used commercially for their desirable

^{*} All Local Health Networks have been authorised for the use of Cyclophosphamide with authorisation certificates maintained by each LHNs WHS business Unit.

physical properties. ACM can be categorised as friable and non-friable. Non-friable asbestos, where it is mixed with other materials for example cement, is the type most commonly found in our built environment. Friable asbestos is more likely to become airborne with prolonged inhalation of asbestos fibers can have the potential to cause serious illness including malignant lung cancer, mesothelioma, asbestosis (a type of pneumoconiosis), and pleural plaques and thickening.

The Work Health and Safety Act 2012 (SA), Work Health and Safety Regulations 2012 (SA) and Approved Codes of Practice provide mandatory requirements in the identification, risk control, and removal of asbestos and asbestos containing materials (ACM).

Reference may be made to the following, for further guidance:

- National Code of Practice How to Manage and Control Asbestos in the Workplace, Dec 2011;
- National Code of Practice How to Safely Remove Asbestos, Dec 2011;
- Safe Work Australia Guidelines Interpretation of Workplace Exposure Standards for Airborne Contaminants, Apr 2013.

For more information refer to GD036 Policy Guideline - Asbestos Safety Management (WHS) [in draft].

4.13 Engineered Nanomaterials

SA Health must take reasonably practicable step to ensure that all foreseeable risks to workers of exposure to any substance, mixture or product containing engineered nanomaterials is eliminated or minimized, i.e. engineered nanomaterials may be present in research laboratories, operating theatres or diagnostic examination rooms. Engineered nanomaterials include:

- Carbon nanotubes;
- Titanium dioxide;
- Zinc oxide;
- Cerium oxide, and;
- Nanoscale Silver.

The use of engineered nanomaterials is subject to the risk management provisions for hazardous chemicals in accordance with <u>SA Health Policy Directive – Hazard Identification and Risk Management (WHS)</u> and examples of risk controls measures include:

- Enclosure:
- Local exhaust ventilation;
- Labelling;
- Laboratory PPE, for example Fit tested P2 face mask, Tyvek coveralls and double gloving.

Further guidance on engineered nanomaterials including workplace exposure standards for carbon nanotubes is available in GD037 Policy Guideline - Nanomaterial Safety [in draft].

4.14 Plant and Equipment Safety

This policy guideline requires additional steps be taken by LHN / HS / BU / WPs with respect to chemical safety risk assessments whenever workplace plant and equipment use or emit hazardous chemicals or dangerous materials.

Diagnostic and therapeutic plant and equipment used for patient care may contain, emit, or necessitate the use and discharge of chemicals, including therapeutic drugs (e.g. cytotoxic drugs, ototoxic chemicals or pharmaceuticals).

Hazardous Chemical SDSs associated with plant and equipment must be made available and accessible to all workers operating or in the vicinity of these devices.

For more information refer to GD038 Policy Guideline – Plant and Equipment Safety (WHS) [in draft].

4.15 Exposure Standards and Health Monitoring

SA Health must take reasonable practicable steps to ensure that workers are not exposed to a hazardous chemical in an airborne concentration at a level that exceeds the relevant exposure standard to the hazardous chemical, and the risk of injury as a result of unsafe oxygen levels or a risk of explosion or fire from gas, mists, fumes or combustible dusts is eliminated or minimised.

Where there is a risk that workers may be exposed to airborne concentrations above the hazardous chemical's exposure standard, air monitoring is required.

For more information on how to interpret exposure standards and comply with the WHS Regulations 2012 (SA), refer to Safe Work Australia's Workplace Exposure Standards for Airborne Contaminants and Guidance on the Interpretation of Workplace Exposure Standards for Airborne Contaminants.

SA Health must ensure health monitoring is provided to a worker carrying out work for the business or undertaking if:

 the worker is carrying out ongoing work using, handling generating or storing hazardous chemicals and there is a significant risk to the worker's health because of exposure to a hazardous chemical.

Reference may be made to <u>SA Health WHSIM Factsheet - Hazardous chemicals (other than lead)</u> requiring health monitoring table;

 the ongoing work carried out by a worker using, handling, generating or storing hazardous chemicals there is a significant risk that the worker will be exposed to a hazardous chemical (other than a hazardous chemical referred to in Schedule 14) and either valid techniques are available to detect the effect on the worker's health or a valid way of determining biological exposure to the hazardous chemical is available and it is uncertain, on reasonable grounds whether the exposure to the hazardous chemical has resulted in the biological exposure standard being exceeded.

SA Health must:

- inform workers and prospective workers about health monitoring requirements;
- ensure health monitoring is carried out by or under the supervision of a registered medical practitioner with experience in health monitoring;
- consult workers in relation to the selection of the registered medical practitioner;

- pay all expenses relating to health monitoring;
- provide relevant information to the registered medical practitioner;
- take all reasonable steps to obtain a report from the registered medical practitioner as soon as practicable after the monitoring has been carried out;
- provide a copy of the report to the worker and the regulator if the report contains adverse test result or recommendations that remedial measures should be taken.
 Also provide the report to all other PCBUs who have a duty to provide health monitoring for the worker;
- keep reports as confidential records for at least 30 years after the record is made (40 years for reports relating to asbestos exposure);
- not disclose the report to anyone without the worker's written consent unless required under the WHS Regulations.

For further information on health monitoring requirements contact your LHN/HS Work Health and Safety business unit or make reference to SA Health WHSIM Form - Health Surveillance Program – Asbestos (FOR0017) [in draft], if relevant.

4.16 Personal Protective Equipment (PPE)

PPE is anything used or worn by a worker to minimise risk to the person's health or safety and includes a wide range of clothing and safety equipment.

All SA Health workers must wear PPE in accordance with any information, training or reasonable instruction.

PPE must be suitable for the task being performed, taking in consideration the hazardous chemical in use and safety data sheet PPE requirements; for example:

- when preparing and invasively administering cytotoxic drugs and the requirement to wear a fit tested N95/P2 respiratory mask;
- when handling highly toxic chemicals, e.g. tamoxifen in powder form and the requirement to wear a fit-tested P3 respiratory mask;
- selecting appropriate chemical-resistant gloves that offer the best resistance to the chemical being used or handled, e.g. nitrile gloves/double latex when handling cytotoxic drugs or butyl gloves when handling concentrated mineral acids such as sulphuric, nitric, hydrochloric, and phosphoric acids
- PPE requirements when handling *ortho*-phthalaldehyde (OPA)

Further reference may be made to <u>SA Health WHSIM Factsheet - Safe Use of Ortho-Phthalaldehyde (OPA)</u> and the SA Health Policy Guideline – Personal Protective Equipment – Selection for guidance [in draft].

4.17 Chemical Spill Management

Those persons in management or control of hazardous chemicals within SA Health workplaces must ensure, so far as is reasonably practicable, that where there is a risk of a spill or leak of a hazardous chemical in a solid or liquid form, provision is made in each part of the workplace where a hazardous chemical is used, handled, stored or generated for a spill containment system that contains within the workplace any spill or leak of a hazardous chemical and any resulting effluent.

The spill containment system must describe how to contain, clean up and dispose of the spill or leak and any resulting effluent. The system must not create a hazard by bringing

together different hazardous chemicals that are not compatible or that would react together to cause a fire, explosion, harmful reaction or evolution of flammable, toxic or corrosive vapour.

For large quantities of hazardous chemicals, bunding may be required. Bunding should be designed and constructed in accordance with the relevant Australian Standard specific to the type of hazardous chemical, for example *AS 1940: The storage and handling of flammable and combustible liquids*, and in consultation with LHN Asset and Security Management Units and the emergency services authority.

4.18 Waste Management

The principal source of guidance on conditions for safe disposal of hazardous chemicals is located in the hazardous chemical's SDS. SA Health LHN/HS/BU should also refer to local waste management procedures.

The disposal of asbestos waste is controlled by the Environment Protection Authority ('EPA') under the *Environmental Protection Act 1970* and the *Environmental Protection (Prescribed Waste) Regulations 1998*. In addition, the EPA controls the transportation of asbestos waste when undertaken by a commercial contractor;

Refer to the SA EPA 414/3 Asbestos Waste Guidelines for additional requirements for the management, safe handling and disposal of asbestos waste.

There are additional responsibilities related to the removal and disposal of asbestos including licensing requirements which are detailed in the SafeWork Australia National Code of Practice: How to Safely Remove Asbestos.

4.19 Emergency Preparedness

SA Health must prepare an effective emergency plan for its workplaces and provide the plan to the emergency services organisation (i.e. MFS) if the quantity of Schedule 11 hazardous chemicals used handled or stored at a workplace exceeds the manifest quantity for that hazardous chemical. The plan must be revised in accordance with any recommendations made by the primary emergency services organisation i.e. MFS, to ensure its effectiveness.

The purpose of the emergency plan is to plan for, and thus minimise the effects of any Notifiable Incident at a workplace resulting from handling of hazardous chemicals. When developing an emergency plan, consideration must be had to the following factors:

- the nature of the work being carried out at the workplace;
- the nature of the hazards at the workplace;
- the size and location of the workplace;
- the number of workers and other persons at the workplace.

For workplaces that use, store or handle large quantities of hazardous chemicals, providing a copy of emergency plans and details of actions to be taken in the event of an alarm or emergency situation to neighbouring sites may assist coordinating responses in the event of an emergency.

Additional information regarding emergency management associated with the storage and handling of flammable hazardous chemicals is available in *AS 1940: The storage and handling of flammable and combustible liquids*.

INFORMAL COPY WHEN PRINTEDChemical Safety in the Workplace (WHS) Policy Guideline

Page 16 of 26

SA Health must take reasonably practicable steps to ensure the risk of injury as a result of accidental fire and exposure is minimized by providing appropriately designed, installed, tested and maintained fire protection and fire-fighting equipment and access to emergency and safety equipment. For more information on emergency management related activities refer to the <u>SA Health Emergency Management (EM) Framework 2015</u>, <u>SA Health Policy Directive – Emergency Management (D0377)</u> and local LHN Emergency Management Plans.

4.20 Incident Management

In accordance with <u>SA Health Policy Directive – Work Health Safety Reporting and Investigation</u> efficient and timely hazard and incident reporting, investigation and resolution is an integral component of a successful and compliant safe work system.

All WHS hazard, incidents with injury and/or no harm must be reported on the SA Health Safety Learning System (SLS). Refer to <u>SA Health WHSIM Procedure – Reporting and Investigating WHS Hazards and Incidents</u> and <u>SA Health WHSIM Flowchart – Work Health Safety Incident Reporting and Investigation for the step by step process.</u>

All incidents that affect a client/patient (or other persons) must be reported as a patient incident in the SA Health Safety Learning System (SLS) to ensure the correct investigation is conducted.

Where an injury has been sustained by a worker, the injury must also be reported to WHS Injury Management on 1800 702 264. All SAAS workers must report the injury to the SAAS State Duty Manager on 1800 886 268.

All dangerous incidents, work related deaths and serious injuries that require admittance to hospital as an inpatient or immediate treatment for any condition constitute a Notifiable Incident and must be reported to the regulator SafeWork SA as soon as practicable.

In the context of this policy guideline, a dangerous incident includes an incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to—

- an uncontrolled escape, spillage or leakage of a substance; or
- an uncontrolled implosion, explosion or fire; or
- an uncontrolled escape of gas or steam; or
- an uncontrolled escape of a pressurised substance.

For further guidance on how to report a notifiable incident, refer to flowchart <u>SA Health</u> <u>WHSIM Form – Reporting and Notification of a Notifiable Incident.</u>

4.21 First Aid Management

Where the risk of exposure to a hazardous chemical has the potential to result in serious injury or illness to a worker, first aid management must be planned, coordinated and implemented. These workplaces are deemed to be "High Risk" and require first aid management to be well organised should an incident occur.

For more information to determine first aid requirements for high risk workplaces refer to SA Health Policy Guideline – First Aid Management [in draft].

4.22 Records Management

SA Health is accountable to maintain and protect the integrity and accessibility of all official documents and records by ensuring SA Health LHN/HS/BU and workplaces have a robust document control and records management system.

 All official WHSIM records must be retained either centrally or locally in accordance with Work Health Safety Regulations 2012 (SA) and disposed of in accordance with GDS15 – General Disposal Schedule (State Records), SA Health Record Management Procedure 005 and <u>SA Health Policy Guideline - System</u> Documentation Management (WHSIM).

Records are to be kept as follows:

- Hazardous chemical risk assessments (task and pre-purchase) for at least 5 years (unless there is indication for health surveillance / environmental monitoring – then permanent record);
- Hazardous chemical registers permanently available in the work area;
- Air-monitoring results for at least 30 years by LHN/HS/BU
- Health surveillance reports for at least 30 years after the record is made (40 years for reports relating to asbestos exposure) by SA Health centrally. Must be kept separate from any Human Resource records and Hospital Medical Records, and kept confidential;
- Worker incident reports for any suspected exposure to asbestos for 30 years by the LHN/HS/BU;
- Prohibited and restricted carcinogens records for 30 years after the authorisation ends;
- Hazardous chemical training for at least 5 years by LHN/HS/BU.

4.23 Information, Training, Instruction and Supervision

In order to reduce the risk to a workers health and safety arising from hazardous chemicals at the workplace, appropriate information, training, instruction and supervision must be provided to any worker who uses, handles and stores hazardous chemicals or is likely to be exposed to hazardous chemicals, ensuring that delivery is easily understood. The amount of detail and extent of training will depend on the nature of the hazards and the complexity of the work procedures and control measures required to minimise the risks.

Information, training and instruction should include the following topics:

- the nature of the hazardous chemicals involved and the risks to the worker;
- the control measures implemented, how to use and maintain them correctly;
- the arrangements in place to deal with emergencies, including equipment, evacuation procedures, containing and spill management and first aid instructions;
- the selection, use, maintenance and storage of any personal protective equipment (PPE) required to control risks and the limitations of the PPE;
- any health monitoring which may be required and the worker's rights and obligations;
- the labelling of containers of hazardous chemicals, the information that each part of the label provides and why the information is being provided;
- the availability of SDS for all hazardous chemicals, how to access the SDS, and the information that each part of the SDS provides;

• the work practices and procedures to be followed in the use, handling, processing, storage, transportation, cleaning up and disposal of hazardous chemicals.

Records of hazardous chemical training must be kept for at least 5 years, documenting the name of the participant, the date and topic.

5. Roles and Responsibilities

The following Roles and Responsibilities are specific to this policy guideline and should be read in conjunction with <u>SA Health Policy Directive – Roles, Responsibilities and Governance (WHS)</u>:

5.1 Chief Executive / Deputy Chief Executives

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with the intent of this policy quideline:
- Establish awareness of and accountability for the implementation of this policy guideline.

5.2 Chief Executive Officers / Chief Operating Officers (LHN / HS / BU)

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with the intent of this policy guideline;
- Establish awareness of and accountability for the implementation of this policy guideline;
- Provide financial and physical resources needed for the implementation and support of this Policy Guideline;
- Ensure that so far as reasonably practicable, that workers and other are not exposed to health and safety risks arising from the business or undertaking.
- Ensure that the business or undertaking has and uses appropriate resources and processes to eliminate or minimise chemical risks at the workplace.

5.3 Executive Directors / General Managers / Directors (LHN / HS / BU)

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with the intent of this policy guideline;
- Ensure use of appropriate resources and processes to eliminate or minimise chemical risks that arise from the business or undertaking;
- Ensure that so far as reasonably practicable, that workers and other are not exposed to health and safety risks arising from the business or undertaking;
- Ensure that managers and supervisors have the knowledge and the skills to determine the hazardous chemical training needs of workers;
- Monitor the effectiveness of existing hazardous chemical risk control measures, strategies and treatments.

5.4 Site Managers / Line Managers / Supervisors / Team Leaders

Will take reasonable practicable steps to:

• Where relevant, exercise due diligence to ensure compliance with the intent of this policy guideline;

- Ensure that so far as reasonably practicable, that workers and others are not exposed to health and safety risks arising from the business or undertaking;
- Ensure all chemical incidents, hazards and unsafe working practices are reported on the SA Health Safety Learning System (SLS) before the end of the shift / working day:
- Provide workers with adequate direction and support to fulfil their responsibilities regarding workplace hazardous chemical safety;
- Ensure that mechanisms are in place to identify hazardous chemicals;
- Ensure that all hazardous chemicals containers are correctly labelled;
- Ensure that mechanisms are in place to accurately maintain work area hazardous chemical registers including their current safety data sheets and risk assessments are kept up to date and made available to all workers;
- Ensure that a current Safety Data Sheets is available and accessible for each hazardous chemical;
- Conduct a risk assessment of hazardous chemicals prior to initial use:
- Consult with workers and workplace Health and Safety Representatives during hazard identification and risk management for hazardous chemicals in the workplace;
- Ensure that safe work procedures are developed, implemented, reviewed and monitored for effectiveness, whenever potential hazards are identified;
- Take corrective actions to control identified hazards and risks arising from workplace hazardous chemicals;
- Evaluate the effectiveness of existing risk controls, strategies and treatments and regularly report on outcomes and on any incidents involving hazardous chemicals;
- Appropriate signage or placarding is installed
- Workers are provided with personal protective equipment that is regularly inspected and maintained, and provided with information and instruction on its correct use;
- Ensure appropriate first aid facilities are available in the immediate vicinity as required;
- Regulations governing health surveillance, record keeping and emergency services are complied with where applicable.

5.5 Workers

Will take reasonable care to:

- Not adversely affect the health and safety of themselves and other persons;
- Comply with any reasonable instruction and with all relevant SA Health policies, LHN/HS/BU procedures and information relating to health and safety at the workplace;
- Use hazardous chemicals in accordance with the information, instruction and training provided on its use;
- Report all hazardous chemical incidents, hazards and unsafe working practices to line manager / supervisors and on the SA Health Safety Learning System (SLS) before the end of the shift / working day
- Assist line supervisor with the risk assessment and hazard control process for workplace hazardous chemicals, as directed.

5.6 Workforce Health Professionals

Will take reasonable care to:

 Provide specialist advice, guidance and recommendations with respect to legislative requirements including interpretation of the WHS Regulations 2012 (SA) and relevant Codes of Practice;

- Facilitate the implementation of this policy guideline throughout their respective LHN / HS / BU / WP;
- Monitor compliance with this policy guideline and report on implementation outcomes;
- Provide advice, information and support to Manager and workers with regards to hazard identification, risk management, and any incident involving hazardous chemicals throughout their delegated LHN/HS/BU/WP;
- Ensure an investigation is conducted and the appropriate corrective actions have been taken for all hazardous chemical incidents
- Ensure SafeWork SA has been notified for all notifiable incidents
- Consult with LHN/HS/BU/WP Health and Safety Representatives with respect to hazardous chemical risk management.

5.7 SA Health Procurement and Supply Chain Management (Stores)

Will take reasonable care to:

Ensure all hazardous chemicals received are stored appropriately.

5.8 Contractors

Will take reasonably practicable steps to:

- Exercise due diligence (where relevant) to ensure compliance with the intent of this Policy Guideline;
- Abide by the terms of the contract / service level agreement, including compliance with work health and safety responsibilities for induction and orientation prior to commencement of any contracted work;
- Ensure that they and any subcontractors that may be engaged by them possess all the competence, accreditations, licences and permits that may be required for work to be performed for SA Health;
- Ensure that a risk management approach is undertaken to identify any hazards and risks associated with the task(s) commissioned from them, taking into account physical location of the works and heeding workplace alerts and cautions that are present at that location;
- Report any incident involving hazardous chemicals in accordance with <u>SA Health</u>
 Policy Directive Work Health Safety Reporting and Investigation;
- Comply with SA Health / LHN / HS / BU / WP policy, policy guidelines, safe work procedures and instructions by SA Health authorised personnel (as relevant).

6. Reporting

6.1 Reporting Incidents to the Regulator

All dangerous incidents, work related deaths and injuries that require admittance to hospital as an inpatient or immediate treatment for any condition constitute a Notifiable Incident and must be immediately reported to the regulator SafeWork SA in accordance with Section 38 of the *Work Health and Safety Act 2012* (SA).

7. EPAS

N/A

National Safety and Quality Health Service Standards

Q			②	0		0	#	<u></u>	(X)
National Standard 1	National Standard 2	National Standard 3	National Standard 4	National Standard 5	National Standard 6	National Standard 7	National Standard 8	National Standard 9	National Standard 10
Governance for Safety and Quality in Health Care	Partnering with Consumers	Preventing & Controlling Healthcare associated infections	Medication Safety	Patient Identification & Procedure Matching	<u>Clinical</u> <u>Handover</u>	Blood and Blood Products	Preventing & Managing Pressure Injuries	Recognising & Responding to Clinical Deterioration	Preventing Falls & Harm from Falls
		\boxtimes							

9. Other

N/A

10. Risk Management

Work Health and Safety risk management guidance and considerations defined in this policy guideline align in principle with the <u>SA Health Risk Management Framework 2014</u> and ISO 31000 Risk Management- Principles and guidelines.

11. Evaluation

In accordance with <u>SA Health Policy Directive – Performance Review and Continuous</u> <u>Improvement</u>, implementation of this Policy Guideline will be monitored via the SA Health WHS Internal Audit Program against the following criteria:

- A hazard identification and risk management process is established, monitored and reviewed in consultation with workers for use of hazardous chemicals in the workplace.
- Risk assessments are competed for all processes involving the use of hazardous chemicals.
- Safe work procedures are developed and reviewed for processes involving Hazardous Chemicals.
- Hazardous Chemical risk assessments are reviewed.
- Hazardous Chemical registers are developed and maintained.
- Hazardous Chemical containers are appropriately labelled.
- Chemical cabinets and chemical stores have correctly segregated chemicals.
- Current safety data sheets for all hazardous chemicals are accessible to all workers.
- Hazardous Chemical safety is incorporated into the SA Health procurement processes.
- Workplaces have provided suitable spill kits based on foreseeable chemical spills.
 INFORMAL COPY WHEN PRINTEDChemical Safety in the Workplace (WHS) Policy Guideline

 Page 22 of 26

- Safe Work SA notified of Manifest quantities of hazardous chemicals.
- Emergency Plans developed and provided to Emergency Services as required.
- Security risks for chemicals of security concern and controlled substances have been assessed and suitable controls introduced.
- Induction and training is provided to all relevant workers including safe work procedures.
- Environmental and personal monitoring conducted in accordance with relevant standards.
- Worker and supervisor training records are compiled and maintained, including records of the Hazardous Chemical Safety (WHS) e-learning training module.
- All other documentation relevant to Hazardous Chemicals is maintained for requisite time frames.

12. Definitions

Refer to <u>SA Health Work Health Safety Injury Management System – Glossary and Terms</u> for further definitions and clarification on general terms used throughout this policy guideline.

In the context of this document:

- **ADG Code** means: the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, approved by the Australian Transport Council.
- Article means: a manufactured item, other than a fluid or particle, which is formed
 into a particular shape or design during manufacture and has hazard properties
 and a function that are wholly or partly dependent on the shape or design.
- Biological monitoring means: the measurement and evaluation of a substance, or its metabolites, in the body tissue, fluids or exhaled air of a person exposed to that substance or blood lead level monitoring.
- Class of dangerous goods means: the number assigned to the goods in the ADG Code indicating the hazard, or most predominant hazard, exhibited by the goods.
- **Class label** means: the pictogram described in the ADG Code for a class of dangerous goods.
- Combustible substance means: a substance that is combustible and includes dust, fibres, fumes, mists or vapours produced by the substance.
- **Competent Person** means: a member of DPTI who has acquired through training, qualification or experience, the knowledge and skills to carry out this task.
- **Container** means: anything in or by which a hazardous chemical is, or has been, wholly or partly covered, enclosed or packed, including anything necessary for the container to perform its function as a container.
- Correct classification means: the set of hazard classes and hazard categories assigned to a hazardous chemical when it is correctly classified.
- **Dangerous substance** means: is a hazardous chemical that is defined by the Dangerous Substances Act, 1979, to be dangerous. Dangerous goods are classified on the basis of immediate physical or chemical effects that may impact on people, property or the environment explosive, flammable, corrosive, chemically reactive, highly combustible, acutely toxic, radioactive or infectious.
- **Division of dangerous goods** means: a number, in a class of dangerous goods, to which the dangerous goods are assigned in the ADG Code.
- **Engineered nanoparticles** means: **Nanoparticles** between 1 nm and 100 nm manufactured to have specific properties or composition. Abbreviation ENP.

- Engineered nanomaterials means: Nanomaterial intentionally produced for commercial purposes to have specific properties or specific composition. Abbreviation ENM.
- **Exposure standard** means: the airborne concentration of a particular substance or mixture that must not be exceeded. The exposure standard can be of three forms:
 - 8-hour time-weighted average;
 - peak limitation;
 - short term exposure limit.
- **Flash point** means: the lowest temperature (corrected to a standard pressure of 101.3 kPa) at which the application of an ignition source causes the vapours of a liquid to ignite under specified test conditions.
- GHS means: the 'Globally Harmonized System of Classification and Labelling of Chemicals, 3rd Revised Edition', published by the United Nations as modified under Schedule 6 of the WHS Regulations. Transition to the GHS will occur over a 5 year period ending on 31 December 2016.
- Hazard means: a situation or thing that has the potential to harm people, property
 or the environment. The GHS covers physicochemical, health and environmental
 hazards for hazardous chemicals.
- Hazard category means: a division of criteria within a hazard class in the GHS.
- **Hazard class** means: the nature of a physical, health or environmental hazard under the GHS. *Note: This includes dangerous goods.*
- Hazard pictogram means: a graphical composition, including a symbol plus other graphical elements, that is assigned in the GHS to a hazard class or hazard category.
- Hazard statement means: a statement assigned in the GHS to a hazard class or hazard category describing the nature of the hazards of a hazardous chemical including, if appropriate, the degree of hazard.
- Hazardous chemical means: a substance, mixture or article that satisfies the
 criteria for a hazard class in the GHS (including a classification referred to in
 Schedule 6 of the WHS Regulations), but does not include a substance, mixture or
 article that satisfies the criteria solely for one of the following hazard classes:
 - (a) acute toxicity—oral—category 5;
 - (b) acute toxicity—dermal—category 5;
 - (c) acute toxicity—inhalation—category 5;
 - (d) skin corrosion/irritation—category 3;
 - (e) serious eye damage/eye irritation— category 2B;
 - (f) aspiration hazard—category 2;
 - (g) flammable gas—category 2;
 - (h) acute hazard to the aquatic environment—category 1, 2 or 3;
 - (i) chronic hazard to the aquatic environment—category 1, 2, 3 or 4;
 - (i) hazardous to the ozone layer.
 - Note: The Schedule 6 tables replace some tables in the GHS.
- Hazchem Code means: 'Hazchem Code' under the ADG Code. Also known as the Emergency Action Code.
- Health monitoring means: monitoring a person to identify changes in the
 person's health status because of exposure to certain substances. Health
 monitoring must be supervised by a registered medical practitioner with
 experience in health monitoring.
- **Label** means: written, printed or graphical information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the container of a hazardous chemical.
- Manufacture includes: the activities of packing, repacking, formulating, blending, mixing, making, remaking and synthesizing of the chemical.

- **Mixture** means: a combination of, or a solution composed of, two or more substances that do not react with each other.
- Placard means: a sign or notice:
 - displayed or intended for display in a prominent place, or next to a container or storage area for hazardous chemicals at a workplace
 - that contains information about the hazardous chemical stored in the container or storage area.
- Physicochemical means: relating to both physical and chemical properties or to
 physical chemistry. The physicochemical properties of a chemical includes
 solubility, stability, form definition, solid-state properties, partition coefficient and
 ionization constant(s).
- Placard quantity means: the quantity referred to in Schedule 11 of the WHS Regulations, table 11.1, column 4 for that hazardous chemical.
- Precautionary Statement means: a phrase prescribed by the GHS that describes
 measures that are recommended to be taken to prevent or minimise the adverse
 effects of exposure to a hazardous chemical or the improper handling of a
 hazardous chemical.
- **Self-Contained Breathing Apparatus (SCBA)** means: an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.
- **Substance** means: a chemical element or compound in its natural state or obtained or generated by a process:
 - including any additive necessary to preserve the stability of the element or compound and any impurities deriving from the process, but;
 - excluding any solvent that may be separated without affecting the stability of the element or compound, or changing its composition.
- Supply includes: selling or transferring ownership or responsibility for a chemical.

13. Associated Policy Directives / Policy Guidelines

SA Health Emergency Management (EM) Framework 2015

SA Health Policy Directive – Emergency Management (D0377)

SA Health Policy Directive - Hazard Identification and Risk Management (WHS)

SA Health Policy Directive - Induction and Orientation

SA Health Policy Directive – Performance Review and Continuous Improvement

SA Health Policy Directive - Roles, Responsibilities and Governance (WHS)

SA Health Policy Directive – Work Health, Safety and Injury Management (WHSIM)

SA Health Policy Directive – Work Health Safety Reporting and Investigation

GD042 Policy Guideline - Contractor Safety Management (WHS) [in draft]

SA Health Policy Guideline – Personal Protective Equipment – Selection [in draft]

SA Health Policy Guideline - System Documentation Management (WHSIM)

SA Health Policy Guideline—Work Environment and Facilities Safety (WHS) [GD024 under review]

SA Health Procedure – Reporting and Investigating WHS Hazards and Incidents

SA Health Risk Management Framework 2014

SA Health Work Health Safety Injury Management System – Glossary and Terms

14. References, Resources and Related Documents

- AS/NZS 1940:2004 The storage and handling of flammable and combustible liquids;
- AS/NZS 2243.10:2004 Safety in laboratories Part 10: Storage of chemicals;
- AS/NZS 3780:2008 The storage and handling of corrosive substances;
- AS/NZS 3833:2007 The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers;
- AS/NZS 4332:2004 The storage and handling of gases in cylinders.
- Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace July 2012
- Code of Practice: Labelling of Workplace Hazardous Chemicals December 2011
- Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals December 2011
- Guide for Preventing and Responding to Cyanide Poisoning in the Workplace April 2013
- Guide for Medical Practitioners Health Monitoring for Exposure to Hazardous Chemicals February 2013
- Guide for PCBU Health Monitoring for Exposure to Hazardous Chemicals February 2013
- Guide for Worker Health Monitoring for exposure to Hazardous Chemicals February 2013
- Implementation of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) – Guidance on the Classification of Hazardous Chemicals under the WHS Regulation April 2012.
- National Code of Practice for Chemicals of Security Concern 2013
- Safe Handling and Use of Carbon Nanotubes, Safe Work Australia,
- SA Health WHSIM Factsheet Safe Use of Ortho-Phthalaldehyde (OPA) (FS002)
- SA Health WHSIM Flowchart Work Health Safety Incident Reporting and Investigation(FOR022)
- SA Health WHSIM Form Chemical Safety Risk Assessment (FOR206)
- SA Health WHSIM Form Chemical Safety -Task Risk Assessment (SWMS) (FOR321)
- SA Health WHSIM Factsheet Comparison of GHS Hazard Pictograms With ADG Code Class Labels (FS011)
- SA Health WHSIM Factsheet Hazardous chemicals (other than lead) requiring health monitoring table (FS012)
- SA Health WHSIM Factsheet Chemicals of Security Concern Table (FS010)
- SA Health WHSIM Form Reporting and Notification of a Notifiable Incident(FOR223)
- SA Health WHSIM Factsheet Table of Prohibited carcinogens and Restricted Hazardous Chemicals (FS013)
- SA Health WHSIM Factsheet Table of Schedule 11 Placard and Manifest Quantities (FS014)
- SA Health WHSIM Form Worksite Safety Checklist Grounds and Gardens(FOR199)
- SA Health WHSIM Form Worksite Safety Inspection Checklist Maintenance(FOR204)
- SA Health WHSIM Register Model Chemical Safety Manifest (R011)
- SA Health WHSIM Register Model Chemical Safety Register (R006)
- SA Health WHSIM Template Safe Work Procedure (SWP) (TMP067)
- Work Health and Safety Act 2012 (SA)
- Work Health and Safety Regulations 2012 (SA)
- Workplace Exposure Standards for Airborne Contaminants. Guidance on the Interpretation of Workplace Exposure Standards for Airborne Contaminants.