1 OBJECTIVE

a) To prevent the occurrence of injuries or illness, damage to property or harm to the environment resulting from the use, handling, storage, disposal and transportation of chemical and hazardous substances used in Council workplaces.

b) To outline the processes Kempsey Shire Council employs for the purchase, generation, storage, use and disposal of hazardous substances on or in all of its work locations, plant, buildings and other community facilities.

c) To provide a systematic process of identifying and controlling potential hazards in order to minimise the risk of adverse health and safety effects to persons from accidental exposure and reduce the impact of unintended spillages to property and the environment.

2 STATEMENT

a) All workers employed by the Kempsey Shire Council and any contractor who carries out work at any Kempsey Shire Council facility shall comply with this procedure.

b) The requirements stipulated in this document are minimum requirements. Other activities may require additional control measures. Such measures shall be additional to, and not in place of the requirements stipulated in this document.

c) All workers employed by Kempsey Shire Council shall comply with Work Health Safety legislation and Codes of Practice identified within the references section of this document together with the Council’s Work Health Safety Policy and its supporting procedures.

d) Council uses the services of Chemwatch to provide Safety Data Sheets (SDS) and to manage and record its chemical inventory.

3 REFERENCES

Work Health & Safety Act 2011

Work Health & Safety Regulations 2011 - Chapter 7 Hazardous Chemicals

Code of Practice - Managing risk of hazardous chemicals in the workplace 2012

Code of Practice - Labelling of Workplace Hazardous Chemicals - 2015

Code of Practice Preparation of Safety Data Sheets for Hazardous Chemicals 2016
4 DEFINITIONS

**Chemical Inventory** means a list of all chemicals held at that work location. It identifies hazardous chemicals and indicates the normal quantities held. The inventory document can be printed from Chemwatch when a team/location manifest has been developed.

**Chemical Manifest** means a listing of hazards rated chemicals that exceed the quantities specified within the WHS Regulation at schedule 11.

**Compatibility report** identifies that chemical storage arrangements are sound; that is the chemicals involved in the manifest can be stored together and do not react to each other resulting in a hazardous situation.

**Competent person** means acquired through training a properly qualified person having the necessary ability, knowledge, or skill to handle hazardous substances.

**Chemwatch** is a chemical management system which provides access to Safety Data Sheets (SDS) and allows users to keep track of workplace chemical use and storage. Council uses the services of Chemwatch to provide SDS’s and to manage and record its chemical inventory.

**Dangerous Goods** is a hazardous substance defined by the Dangerous Goods Act 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.

**Dangerous goods class** – the class allocated to a substance under the ADG Code.

**GHS** means the Globally Harmonised System of Classification and Labelling of Chemicals, 3rd Revised Edition’, published by the United Nations as modified under Schedule 6 of the WHS Regulation. Transition to GHS in Australia ends on 31 December 2016 with the mandatory implementation date of 1 January 2017.

**Hazard** is a source of, or situation that has the potential to, harm a person, the environment or damage property.

**Hazardous Chemicals** in relation to chemicals, a hazard is a set of inherent properties of the substance, mixture, article or process that may cause adverse effects to organisms or the environment.

There are two broad types of hazards associated with hazardous chemicals which may present an immediate or long term injury or illness to people. These are:

**Health hazards** – These are properties of a chemical that have the potential to cause adverse health effects. Exposure usually occurs through inhalation, skin contact or ingestion. Adverse health effects can be acute (short term) or chronic (long term). Typical acute health effects include headaches, nausea or vomiting and skin corrosion, while chronic health effects include asthma, dermatitis, nerve damage or cancer.

**Physicochemical hazards** – These are physical or chemical properties of the substance, mixture or article that pose risks to workers other than health risks, as they do not occur as a consequence of the biological interaction of the chemical with people. They arise through inappropriate handling or use and can often result in injury to people and/or damage to property as a result of the intrinsic physical hazard. Examples of physicochemical hazards include flammable, corrosive, explosive, chemically reactive and oxidising chemicals.
Many chemicals have both health and physicochemical hazard.

**Hazardous Substance** is a substance that contains ingredients that may be harmful to health in the short, medium or long term.

**Health monitoring** is the biological monitoring which is the measurement of a hazardous substance in the body.

**Hierarchy of control** is a list of control measures, in priority order, that can be used to eliminate or minimise exposure to the hazard:

- **Level 1** – Elimination or Substitution
- **Level 2** – Isolation or Engineering
- **Level 3** – Administration and PPE

**Label** means a set of information on a container which identifies the substance in the container. Labels are used to identify if the substance is hazardous and provides basic information about the safe use and handling of the substance.

**Risk** is the probability (likelihood) of harm or damage occurring from exposure to a hazard, and the likely consequences of that harm or damage.

**Risk Control** means taking action to first eliminate health and safety risks so far as is reasonably practicable, and if that is not possible, minimizing the risks so far as is reasonably practicable. Eliminating the hazard will also eliminate any risks associated with the hazard.

**SDS** means a safety data sheet (SDS), previously called a Material Safety Data Sheet (MSDS), is a document that provides technical information on the properties of hazardous chemicals, how they affect health and safety in the workplace and on how to manage the hazardous chemicals in the workplace. For example it includes information on the identity, health and physicochemical hazards, safe handling and storage, emergency procedures and disposal considerations.

**Schedule 11 WHS Regulation** – Where the workplace uses, handles or generates hazardous chemicals it must comply with Chapter 7 of the WHS Regulation 2011. Special requirements applicable to the use, storage and handling of chemicals listed in schedule 11 of the Regulation apply. See Attachment 1 of this procedure.

5 **ROLES AND RESPONSIBILITIES**

All Kempsey Shire Council workers are responsible for ensuring that breaches of this procedure do not occur.

5.1 **General Manager and Directors**

a) Provide the resources and support necessary to implement this procedure.

5.2 **Managers**

a) Ensure the objectives of this procedure are implemented into work practices.
b) Review Safe Work Method Statements (SWMS) developed for the use of chemicals that are rated as hazardous and approve their implementation prior to use.

c) Review and approve risk management approaches when hazardous rated chemicals are used in a process that is contrary to manufactures intend uses when they are of the view the work can be undertaken safely.

d) Monitor the establishment and maintenance of hazardous chemical registers for sites and location under their control and direction.

e) Provide spill containment facilities where required.

f) Ensure staff have the training identified in SWMS around the use of hazardous rated chemicals prior to using the chemical in the work place.

g) Provide access to firefighting equipment in location where hazardous rated chemical are in use and the product's SDS and workplace SWMS controls identify it as required.

h) Prepare an emergency plan for locations where hazardous chemicals and or dangerous goods manifest quantities exceeded the threshold level.

i) Ensure any reported incidents of non-compliance are resolved through training and supervision, counselling, and where necessary disciplinary procedures.

5.3 Team Leader/ Supervisor

a) Identify all chemical used on or at the work location. The identification will include details on the amount of each substance held.

b) Maintain using Chemwatch a chemical inventory for each work location, team, work site under their direction and control.

c) Ensure all chemical container/pipes are labelled in accordance with the referenced codes of practice.

d) Establish SWMS for tasks involving the use of chemicals that are rated hazardous on the SDS ensuring exposure standards are not exceeded.

e) Ensure implementation of appropriate risk control measure in consultation with workers in accordance with the Hierarchy of Control.

f) Ensure that all workers and contractors under their control fully understand the requirements and provisions of this procedure.

g) Identify workers exposed to hazardous chemical and refer to Human Resources to establish health monitoring.

h) Ensure an appropriate level of training and supervision is available and in place when hazardous rated chemicals are used and stored.

i) Ensure chemicals are stored on sites in accordance with their specific SDS.

j) Where the SDS identifies a chemical storage incompatibility changes to the storage arrangement must be made to overcome the incompatibility.
k) Risk assess the hazardous nature of new chemicals by reviewing the SDSs prior to purchase.

5.4 Work Site Supervisor

a) Ensure ignition sources are controlled prior to using hazardous rated chemicals likely to be affected by such ignition sources.

b) Ensure workers have access to current compliant SDS prior to chemical use.

c) Ensure SDS are available and readily accessible at the point of use.

d) Ensure workers expected to use hazardous rated chemicals are provided with relevant risk prevention information and they are aware of the hazards involved.

e) Ensure workers comply at all times with the requirements of this procedure and with safe work procedures for the safe handling of chemicals, including the wearing of PPE.

f) Ensure all chemical related incidents are reported in a timely manner.

5.5 Human Resources

a) Build and maintain the chemical inventory for each location/team/work site from information provided by the team leaders in the Chemical Management System Chemwatch.

b) Instigate health monitoring programs when workers are exposed to hazardous chemicals.

c) Maintain Health Monitoring Register.

d) Provide Health Monitoring reports to those involved in accordance with the WHS Regulation 2011.

5.6 Procurement Coordinator

a) If hazardous rated chemicals are ordered seek non-hazardous alternatives when and if available.

b) Ensure a compliant SDS is distributed to user when hazardous substance is dispatched from stores.

c) Build and maintain an inventory for chemical procurement in chemical management system Chemwatch.

5.6 Workers

a) Have a responsibility to comply with established safe work procedures by using control measures and any other actions designed to protect their health and safety when using and handling chemicals and hazardous substances.

b) Notify their supervisor of any situation they believe may expose persons to risk, including dangerous occurrences, near misses, injuries and illnesses associated with handling of hazardous chemicals.
c) Actively participate and co-operate in the assessment and development of appropriate risk control measures for hazardous substances in accordance with the Hierarchy of Control.

d) Follow instructions for safe usage based on the information given on the product label and SDS.

e) Use safety equipment or personal protective equipment when required, and to take reasonable care in the operation and maintenance of equipment/PPE provided.

f) Reporting all spills and incidents involving a hazardous substance or chemical immediately.

6 PROCEDURES

a) Under the WHS Act, a person conducting a business or undertaking (PCBU) has the primary duty to ensure, so far as is reasonably practicable, that the health and safety of workers and other persons are not put at risk from work carried out as part of the conduct of the business or undertaking. This includes ensuring the safe use, handling and storage of chemical and substances.

b) The WHS Regulations details specific duties for a person conducting a business or undertaking to manage the risks to health and safety associated with using, handling, generating and storing hazardous chemicals at a workplace. The duties include:

i) Correct labelling of containers and pipework, using warning placards and outer warning placards and displaying of safety signs as per section 6:14 of this procedure.

ii) Maintaining a register and manifest (where relevant) of hazardous chemicals and providing notification to the regulator of manifest quantities if required.

iii) Identifying risk of physical or chemical reaction of hazardous chemicals and ensuring the stability of hazardous chemicals.

iv) Ensuring that exposure standards are not exceeded.

v) Provision of health monitoring to workers.

vi) Provision of information, training, instruction and supervision to workers.

vii) Provision of spill containment system for hazardous chemicals if necessary.

viii) Obtaining the current SDS from the manufacturer, importer, supplier of the chemical or the Chemwatch system.

ix) Controlling ignition sources and accumulation of flammable and combustible substances.

x) Provision and availability of fire protection, firefighting equipment and emergency and safety equipment.
xi) Preparing an emergency plan if the quantity of a class of hazardous chemical at a workplace exceeds the WHS Regulation manifest quantity for that hazardous chemical.

xii) Ensuring the manifest is available for inspection and readily accessible to attending emergency services.

xiii) Stability and support of containers for bulk hazardous chemicals including pipework and attachments.

xiv) Decommissioning of underground storage and handling systems.

xv) Notifying the regulator as soon as practicable of abandoned tanks in certain circumstances.

6.1 Determination

In order for Council to meet the requirements of the WHS legislation in providing a safe work environment for all workers and to satisfy Officers’ due diligence requirements. The following criteria are a minimum for all work locations/teams:

i) All chemicals used, store, handled or disposed of on site will be identified.

ii) A chemical inventory will be developed in Chemwatch for each work location or team.

iii) As part of the procurement practices non-hazardous rated chemicals will be sourced in preference to hazardous chemicals when possible.

iv) The purchase of chemicals and other hazardous substances shall be accompanied by the SDS.

v) The quantities held on each site or within each team will be determined and recorded as part of the chemical inventory.

vi) Once a location/team inventory/manifest has been developed within Chemwatch the hazardous chemical register can be obtained as a report from Chemwatch for that team.

vii) Where hazardous rated chemicals exceed limits detailed within Schedule 11 of the WHS Regulation 2011 a manifest in accordance with Clause 347 of the WHS Regulation 2011 will be developed.

viii) A SDS will be obtained from Chemwatch for each chemical held on any particular work location and a hard copy stored on that location at or near the point of use.

ix) A folder for each location or work team will be developed and maintained to accurately reflect the contents of the chemical inventory for that site or team. It will include the following documents: Hazardous Chemical Register, a compatibility report on the storage arrangement and the current SDS for each chemical currently held on that site.

x) All chemicals particularly hazardous chemical will be store according to the requirements of the SDS.
xi) Adjust the storage arrangement if there is a compatibility hazard identified in the Chemwatch compatibility report.

xii) If there is a change to the contents of a storage location the hazardous chemical register will be amended to reflect the change.

xiii) Any task undertaken involving the use of a hazardous substance will be detailed by a SWMS.

xiv) All chemicals will be disposed of in accordance with the SDS.

xv) In the event that a hazardous chemical is to be used contrary to the manufacture intended use a specific risk assessment will be develop to cover the expected use. Approval of this detailed use risk assessment will be the responsibility of the team manager.

xvi) Pipe work and containers which hold chemicals will be label in accordance with COP detailed at section 3 of this document. Any decanted chemical product will be label in a manner similar to the original container labelling. Labels can be printed in a suitable format from Chemwatch system.

xvii) Food containers will not be used when decanting chemicals under any circumstance.

xviii) Risk management practices must be put in place to prevent exposure to hazardous chemicals beyond recognized exposure standards.

xix) The Work Health and Safety Regulation 2011 at Clause 368 details the obligation to undertake health monitoring for workers who are at significant risk of being exposed to Hazardous rated Chemicals.

xx) Where staff are required to use, handle, store or dispose of hazardous chemicals training will be provided in accordance with the SWMS developed and SDS for that chemical application.

xxi) Supervision of workers expected to handle hazardous chemicals must be maintained at all times.

xxii) Contractors who are using chemicals and other hazardous substances shall be required to maintain a copy of their own chemical substance register and applicable SDS information on worksites where the product is being used and stored.

6.2 Developing a Chemical Inventory

There are two stages in the development of a chemical inventory.

a) Stage one is the identification stage which is done by looking at the work location/site/team/vehicles/building etc. and identifying all chemicals on that site or at that location. This work is the responsibility of the team leader.

i) Undertake workplace chemical audit by listing chemicals and recording the quantities at the same time, check to ensure there is a current SDS available for each chemical and record the SDS issue date on the listing refer to attachment 3.
ii) Provide chemical audit documentation to WHS Support and Audit Officer / Human Resources for actioning.

b) Stage two of the development involves the building of registers within the manifest section of Chemwatch. This work will be the responsibility of the Human Resource unit.

c) The output from Chemwatch will be:

   i) A chemical inventory for each work location.
   ii) A Hazardous Chemical Register for each location.
   iii) A Compatibility Report for each location.

d) The WHS Regulation identifies chemical quantities which it titles as the manifest quantities. The work done to build a chemical inventory for each site will assist the organization meet its obligations under these clauses of the regulation should notification be required because quantities have exceeded the Regulation manifest levels.

6.3 The site Chemical Inventory

   a) A chemical inventory will be in place for each work location it will consist of the follow documents:

      i) Listing of all chemicals on site.(Chemical inventory)
      ii) The Hazardous Chemical Register.
      iii) SDS for each chemical held on site.
      iv) A Chemwatch compatibility report for the storage arrangement.

   b) It is the responsibility of the team leader to maintain the chemical inventory as current. Which means all SDSs are in place, are current and can be readily accessed by workers on the site. The Hazardous Chemicals Register is current and the compatibility report reflects the storage arrangement in place with any compatibility hazards managed.

   c) In the event that the compatibility report identifies a potential hazard the storage arrangement will be modified to overcome the hazard and the compatibility report re produced to test the modified storage arrangements.

   d) The chemical inventory will be located at the workplace which allows workers to obtain information and the SDS required in the use of the chemical. This aspect will be part of the site induction arrangements and form part of the training arrangement for the use of chemicals in the work place.

   e) Ensure the Chemwatch chemical manifest for the work teams under their control are maintained as current. All team leaders are provided with editing rights in order to allow them to maintain their Chemwatch manifest folders.
f) If changes occur to the inventory that is chemicals are added or removed or the quantities are changed permanently team leaders must update these details in the workplace Chemwatch manifest folder.

6.4 Chemical Storage

a) Storage quantities shall be kept to a minimum requirement to cater for demand.

b) Chemicals will be store as detailed within the SDS for the particular chemicals involved and in a manner that does not generate a hazard in the workplace.

c) Chemical storage facilities will only store chemicals and will not contain other material or equipment requiring storage.

d) All dangerous substances or dangerous goods shall be stored in approved signposted storage facilities as prescribed by legislation.

e) Placarding shall display proper shipping name, UN Number, Hazchem code and ADG class labelling.

f) A compatibility report via Chemwatch will be run on the storage arrangements to ensure there are no compatibility hazards. In the event that the storage arrangement is changed a new compatibility report will be required.

g) Only trained authorised personnel shall be allowed to access storage areas for chemicals and other hazardous substances.

h) All chemicals must be kept in the original packaging when stored. Original packaging must be kept closed during storage and/or when not in use.

i) Eating and bringing of food inside the storage area shall be strictly prohibited.

6.5 Safety Data Sheets

a) Safety Data Sheets (SDS) contains information supplied by the manufacturer/supplier regarding the chemical composition of the product, associated risks, safe use, handling and storage requirements, spill containment and medical advice if exposure occurs.

b) The SDS must:

i) Be prepared by the manufacturer or supplier and contain 16 elements.

ii) Meet NSW legislative requirements by including name and contact details of the Australian manufacturer or distributor.

iii) Be within 5 years of documented issue date.

iv) Be reviewed annually to ensure risk controls measures remain effective.
c) The details contained in the SDS must be used in the risk analysis and will be used as the basis for training workers on the safe use, handling and storage of chemicals.

d) Whenever a hazardous substance is being used at a work site the appropriate SDS must be made available in a close enough position to allow a worker to easily refer to it should exposure to the substance occur.

e) It is the responsibility of both the person/s purchasing and those using chemical substances to check that a current SDS is provided.

<table>
<thead>
<tr>
<th>Table 1 - SDS Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identification</td>
</tr>
<tr>
<td>2. Hazard(s) identification</td>
</tr>
<tr>
<td>3. Composition/information on ingredients</td>
</tr>
<tr>
<td>4. First-aid measures</td>
</tr>
<tr>
<td>5. Fire-fighting measures</td>
</tr>
<tr>
<td>6. Accidental release measures</td>
</tr>
<tr>
<td>7. Handling and storage</td>
</tr>
<tr>
<td>8. Exposure controls/personal protection</td>
</tr>
<tr>
<td>9. Physical and chemical properties</td>
</tr>
<tr>
<td>10. Stability and reactivity</td>
</tr>
<tr>
<td>11. Toxicological information</td>
</tr>
<tr>
<td>12. Ecological information</td>
</tr>
<tr>
<td>13. Disposal considerations</td>
</tr>
<tr>
<td>14. Transport information</td>
</tr>
<tr>
<td>15. Regulatory information</td>
</tr>
<tr>
<td>16. Other information</td>
</tr>
</tbody>
</table>

6.6 Using Hazardous Chemicals

a) Review of the health hazard information, precautions for use, safe handling and storage information contained in the SDS will occur prior to use.

b) A simple risk assessment is to be performed using information contained in the SDS and any other information based on the intended use of the substance.

c) For all hazardous chemicals, the information contained in the SDS shall be the default risk assessment and control plan for safe use.

d) Where the review of the SDS shows the risk can be controlled in accordance with the information outlined in the SDS then no further risk assessment is required.

e) Where the preliminary risk assessment identifies that the substance cannot be controlled as outlined in the SDS, then a documented detailed risk assessment is required.

f) In the event that a hazardous Chemical is to be used in a task the chemical use will be described in detail within the SWMS for the task.

g) The description will include the hazards involved the risk calculation and the controls for the particular use. In the event that SDS is referenced in the SWMS it will be attached to the SWMS provided for workers that are to undertake the task in the field.
h) Hazardous chemical should only be used in accordance with the manufacture intend use and instructions unless approved by the team Manager.

i) In the event that a hazardous chemical is to be used contrary to the manufacture intended use a risk assessment will be undertaken and a SWMS developed to cover this use.

j) Risk control measures shall be selected in descending order from the Hierarchy of Controls. A combination of control measures may be required to effectively manage the hazard. Depending on the outcomes of the specific risk assessment, this may include both short and long term control measures.

k) In all cases the risk assessment should show that the risk has been reduced as low as reasonably practicable.

l) The risk assessment will detail all controls to be put in place and will not in this circumstance reference the manufacture SDS. The approval and therefore the responsibility for use in this way will sit with the team Manager approving the approach. Approval is required before the work is undertaken.

m) An emergency response plan is required to be in place to ensure an adequate response to an emergency involving the hazardous substance and that appropriate emergency facilities and equipment is in place.

n) Where chemicals are mixed as part of a work activity the person mixing the chemicals must be competent to complete the work safely.

o) The competent person shall ensure appropriate safety information (i.e. hazards, risks, controls to be used) are documented in the SWMS and available to any work group working with this substance.

6.7 Disposal

a) Chemical waste minimisation practices are encouraged through purchasing smaller quantities, using minimum quantities in the workplace and where practicable the sharing of chemical resources.

b) The SDS and where applicable environmental protection and dangerous substances legislation shall be referred to when disposal of substances is require.

c) When indicated on the SDS, substances will be removed from work premises by a licensed operator for disposal at a licenced facility.

d) The team leader is responsible for updating inventory manifests, and hazardous and dangerous substances registers.

6.8 Spill Containment

a) Spill control measures shall be available on site when required by the SWMS/SDS before work with the hazardous rated chemical commences.

b) Workers must have received training in the use of these measure and be in a position to deploy if necessary.
c) Where accidental release of the chemical has occurred the SDS will be referred to and spill containment control measures will be implemented, if safe to do so.

d) In the event of spills and leaks, only qualified and trained personnel shall carry out immediate clean-up in accordance with the emergency preparedness and response procedure.

e) If an accidental exposure has occurred, the person/s involved shall, take whatever steps are necessary to seek any required first aid or emergency assistance.

f) An emergency spill kit shall be made available and deployed in locations where chemicals and other hazardous substances are stored.

6.9 Chemical Labelling Requirements

a) All containers of chemicals and other hazardous substances supplied to, used in, or handled in the workplace shall be appropriately labelled in accordance with the references in section 3 of this procedure.

b) Containers must be clearly labelled to identify the substance and allow it to be used safely. Labelling must include any risks or significant hazards posed by the substance.

c) Each chemical and hazardous substance shall be properly labelled in accordance with the following minimum requirements:

   i) Product identification
   ii) Signal words (e.g. Danger or Warning)
   iii) GHS Pictograms
   iv) Hazard and Precautionary Statements
   v) Use instructions
   vi) Manufacturer's contact details
   vii) Emergency and first aid information

d) In the event that a chemical is identified on a site and is unlabelled or the label has been degraded as so it is unreadable the chemical will be isolated and withdrawn from service and labelled “Caution do not use: unknown substance” until a positive identification can be made. The team leader will then detail action around the use, disposal or storage of the chemical considering the risks involved.

e) If decanting a chemical from the original container to second container, the receiving container is to be labelled as the original. Labels can be obtained by contacting the manufacturer/supplier. Chemwatch has the ability to print labels in a range of suitable formats.

f) Chemicals decanted for immediate use are not required to be labelled provided the container is cleaned immediately after use and it no longer contains any substance residue. Note: any residual chemical left in the
decanted container cannot be stored unless it is decanted back into its original container or relabelled.

g) Decanting containers that are too small for a label must have a label attached to the container, e.g. with string, or have the name of the chemical written on the outside of the container with permanent marker and be stored within another container that is appropriately labelled.

h) Chemical, hazardous or non-hazardous must not be decanted into recycled food containers under any circumstance.

i) Pipe work used for transferring hazardous rated chemicals will be labelled or signed so as their contents can clearly be identified by workers on the site to avoid incorrect use and subsequently any potential harm to people or damage to property or the environment.

j) Hazardous substances and dangerous substances that are transported outside of the Council premises shall comply with the requirements of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG 7.4).

6.10 GHS: Globally Harmonized System of Classification and Labelling of Chemicals

The Globally Harmonised System of Classification and Labelling of Chemicals (GHS) is an internationally agreed-upon system created by the United Nations.

It is designed to replace the various classification and labelling standards used in different countries with a consistent labelling system on a global level.

a) Standardized hazard and precautionary statements, signal words and pictograms will be contained on chemical packaging labels and SDS documentation to communicate hazards and risks.

b) GHS divides hazards into three major hazard groups – health, physical and environmental.

c) As of the 1 January 2017 all chemicals purchased for use on Council worksites must meet GHS classification and labelling requirements.

d) Hazard classification of chemicals may change under the GHS rules. Risk assessment of chemical use shall be undertaken to ensure existing risk control measures are adequate.
6.11 Australian Dangerous Goods classification and grouping.

a) Dangerous goods are substances, mixtures or articles that, because of their properties present an acute hazard to people, property or the environment. Kinds of substances classified as dangerous goods include corrosive, explosive, flammable liquids, chemically reactive or highly toxic substances.

b) Dangerous goods are designated into nine different categories under the Dangerous Goods Code (ADG7) according to their immediate physical or chemical risk. They are easily recognisable by the diamond shaped sign displayed on the substance label.

The nine classes of dangerous goods are:

- Class 1 Explosives
- Class 2 Gases (Flammable, Compressed/Non-Toxic, Poisonous)
- Class 3 Flammable Liquids
- Class 4 Flammable Solids
- Class 5 Oxidisers & Organic Peroxides
- Class 6 Toxic Substances
- Class 7 Radioactive Substances
- Class 8 Corrosive Substances
- Class 9 Miscellaneous Dangerous Goods

c) Dangerous goods incompatible with other substances are to be segregated from other dangerous goods to eliminate or reduce the risk associated with contact. SDS storage compatibility and safe distances recommendations must be followed.

d) As a minimum the following safe distances apply unless stated otherwise in the SDS:

- Solids/liquids – 1.5m
- Gases – 3m

---

1. Carcinogenic, germ cell mutagenic, toxic to reproduction
2. Specific target organ toxicity
e) Dangerous Goods must be separated from people or property. Where barriers are used these must be made from impervious material.

6.12 Health Monitoring

a) Health monitoring will occur for workers undertaking works on behalf of Council where there is ongoing work involving the use of Hazardous Rated Chemicals and the SDS identifies an identifiable disease or health impacts of reasonability and concern, together with the potential for exposure to the product in question.

b) Potential for exposure may mean the only risk controls in place are at PPE level and adverse health impacts are experienced by the worker.

c) Monitoring will be provided to workers as a result of exposure to a hazardous chemical listed in Schedule 14 of the WHS regulation 2011. Refer to Attachment 2.

d) Where reasonably practicable consideration must always be given to using alternative substances if available in order to eliminate any hazardous chemicals listed in Schedule 14 of the WHS Regulation from the workplace.

e) Contractors that propose the use of these listed substances while working in Council workplaces must source alternative products to eliminate the risk of exposure for Council staff.

f) In the event that an exposure occurs the following action will take place:

i) Include details in incident notification and investigation report.

ii) Contact the Team Leader Human Resources and request health monitoring for the people involved.

iii) Provide details on the potential exposure.

iv) Indicate within the incident investigation report a corrective action of health monitoring.

g) Where applicable Human resources will obtain health monitoring reports and pass on to the worker and the Regulator in compliance Clause 375 and 376 WHS Regulation 2011.

h) Health Monitoring Records will be maintained within the corporate records data base TRIM in accordance with Clause 378 of the Work Health and Safety Regulation.

6.13 Training and Supervision

a) Worker will not be expected to or asked to undertake tasks involving the use of hazardous rated chemicals without the provisions of suitable training and or instruction.

b) This training will take into consideration the nature of the work involved, including the particular chemicals hazard and precautionary statements, the risks associated with the task and the control measure to be implemented.
c) The minimum requirement shall be induction into the SDS, the completion of tool boxing and sign off, to the SWMS covering the use of the Hazardous rated Chemical.

d) Supervision will be provided taking into consideration the experience of the operator involved and the workplace risks including the risks introduced by the hazardous rated chemicals to be used.

6.14 Manifest Quantities

a) The manager controlling the site will develop a chemical manifest which will include the requirements of the chemical inventory described at section 6.3 of this procedure for the site when quantities held exceed that shown in Schedule 11 of the Work Health and Safety Regulation 2011. see Attachment 1.

b) This manifest will be developed and then maintained as current. Where a manifest is required it must contain:

i) The relevant Council contacts and their phone numbers.

ii) The address of Council and of sites where the chemicals are stored.

iii) Details of the chemicals, quantities and storage locations.

c) The Regulator will be provided with the manifest information detailed within Clause 348 WHS Regulation and in accordance with the time frames detailed below.

d) A person conducting a business or undertaking at a workplace must ensure that the Regulator is given written notice if a quantity of a Schedule 11 hazardous chemical or group of Schedule 11 hazardous chemicals that exceeds the manifest quantity is used, handled or stored, or is to be used, handled or stored, at the workplace.

e) The notice under sub clause (1) must be given:

i) Immediately after the person knows that the Schedule 11 hazardous chemical or group of Schedule 11 hazardous chemicals is to be first used, handled or stored at the workplace or at least 14 days before that first use handling or storage (whichever is earlier).

ii) Immediately after the person knows that there will be a significant change in the risk of using, handling or storing the Schedule 11 hazardous chemical or group of Schedule 11 hazardous chemicals at the workplace or at least 14 days before that change (whichever is earlier).

iii) As soon as practicable after the Schedule 11 hazardous chemical or group of Schedule 11 hazardous chemicals is no longer used, handled or stored at the workplace and it is not likely to be used, handled or stored at the workplace in the future.

f) The notice under sub clause (1) must include the following:

i) The name and ABN of the person conducting the business or undertaking.
ii) The type of business or undertaking conducted.

iii) If the workplace was previously occupied by someone else—the name of the most recent previous occupier, if known.

iv) The activities of the business or undertaking that involve using, handling or storing Schedule 11 hazardous chemicals.

v) The manifest prepared by the person conducting the business or undertaking under clause 347.

vi) In the case of a notice under sub clause (2) (b) – details of the changes to the manifest.

g) A person conducting a business or undertaking at a workplace must ensure that the Regulator is given written notice as soon as practicable after the Schedule 11 hazardous chemical or group of Schedule 11 hazardous chemicals ceases to be used, handled or stored at the workplace if it is not likely to be used, handled or stored at the workplace in the future.

h) If the placard quantities of a hazardous rated chemical detailed on schedule 11 of the WHS Regulation are to be held on a site then placards needs to be put in place.

The placards will:

i) Be clearly legible by persons approaching the placard.

ii) Be separate from any other sign or writing that contradicts, qualifies or distracts attention from the placard.

iii) Where a placard quantity of the hazardous chemical is contained in a building be located as close as is reasonably practicable to the main entrance of the building.

iv) Located at the entrance to each room or walled section of the building in which the hazardous chemical is used, handled or stored.

v) If the hazardous chemical is contained in a container or outside storage area – located next to the container or outside storage area.

vi) For a placard to which clause 3 applies – located at each entrance to the workplace where an emergency services authority may enter the workplace.

vii) For a placard to which clause 4 applies – located on or next to each container or storage area in which the hazardous chemicals are stored.

viii) For a placard to which clause 6 applies – located at each entrance to a storage area in which the hazardous chemicals are stored.

6.15 Consultation

a) The WHS Act requires that consultation is undertaken, so far as is reasonably practicable, with workers who carry out work for Council who are or are likely to be directly affected by a work health and safety matter.
b) Consultation can take place through formal and informal processes such as the Health and Safety Committee consultation or discussions held between workplace management and workers in the form of tool box talks.

c) Consultation with workers and their health and safety representatives is a critical part of managing work health and safety risks. Consultation with workers and their health and safety representatives is necessary at every step of the risk management process. Managers must ensure health and safety representatives have access to relevant information such as chemical inventories, chemical manifest SDS and SWMS involving the use of hazardous rated chemicals.

d) Workers shall be consulted on chemical issues which may affect their health and safety. A primary focus of these consultative activities shall be hazard identification, risk assessment and risk control.

e) Where hazardous rated chemicals are present, consultation with people who could be affected by the exposure to risks associated with the product will occur as early as possible. Workers usually know the hazards associated with their work and the risks they face. They also have to follow safety instructions and procedures, and they will do this more effectively if they are involved in the identification and safe handling of chemicals. By drawing on experience, knowledge and ideas of workers to identify hazards and determine risk controls are more likely to ensure the effectiveness of implemented controls measures.

6.16 Record Keeping

The following records must be maintained in accordance with Council’s Record Management requirements.

- Risk Assessments
- Chemical register and SDS
- Waste disposal records for dangerous goods
- Induction and training records
- Health surveillance/air monitoring results
- Inspection and testing records for engineering controls
- Dangerous Goods manifest (refer section 6.14)

VARIATION

Council reserves the right to review, vary or revoke this procedure which will be reviewed periodically to ensure it is relevant and appropriate.
### Schedule 11 WHS Regulation

<table>
<thead>
<tr>
<th>Item</th>
<th>Description of hazardous chemical</th>
<th>Placard quantity</th>
<th>Manifest quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flammable gases</td>
<td>Category 1</td>
<td>200L</td>
</tr>
<tr>
<td>2</td>
<td>Gases under pressure</td>
<td>With acute toxicity, categories 1, 2, 3 or 4</td>
<td>50L</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>With skin corrosion categories 1A, 1B or 1C</td>
<td>50L</td>
</tr>
<tr>
<td>4</td>
<td>Aerosols</td>
<td></td>
<td>5000L</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Not specified elsewhere in this Table</td>
<td>1000L</td>
</tr>
<tr>
<td>6</td>
<td>Flammable liquids</td>
<td>Category 1</td>
<td>50L</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Category 2</td>
<td>250L</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Category 3</td>
<td>1000L</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Any combination of chemicals from Items 6 to 8 where none of the items exceeds the quantities in columns 4 or 5 on their own</td>
<td>1000L</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Category 4</td>
<td>10,000L</td>
</tr>
<tr>
<td>11</td>
<td>Self-reactive substances</td>
<td>Type A</td>
<td>5kg or 5L</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Type B</td>
<td>50kg or 50L</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Type C to F</td>
<td>250kg or 250L</td>
</tr>
<tr>
<td>14</td>
<td>Flammable solids</td>
<td>Category 1</td>
<td>250kg</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Category 2</td>
<td>1000kg</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>Any combination of chemicals from Items 12 to 15 where none of the items exceeds the quantities in columns 4 or 5 on their own</td>
<td>1000kg or 1000L</td>
</tr>
<tr>
<td>17</td>
<td>Pyrophoric liquids and pyrophoric solids</td>
<td>Category 1</td>
<td>50kg or 50L</td>
</tr>
<tr>
<td>18</td>
<td>Self-heating substances and mixtures</td>
<td>Category 1</td>
<td>250kg or 250L</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Category 2</td>
<td>1000kg or 1000L</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>Any combination of chemicals from Items 17 to 19 where none of the items exceeds the quantities in columns 4 or 5 on their own</td>
<td>1000kg or 1000L</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>Category 1</td>
<td>50kg or 50L</td>
</tr>
<tr>
<td>Substances which in contact with water emit flammable gas</td>
<td>Category 2</td>
<td>250kg or 250L</td>
<td>2500kg or 2500L</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Category 3</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
<td></td>
</tr>
<tr>
<td>Any combination of chemicals from Items 21 to 23 where none of the items exceeds the quantities in columns 4 or 5 on their own</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
<td></td>
</tr>
<tr>
<td>Oxidising liquids and oxidising solids</td>
<td>Category 1</td>
<td>50kg or 50L</td>
<td>500kg or 500L</td>
</tr>
<tr>
<td>Category 2</td>
<td>250kg or 250L</td>
<td>2500kg or 2500L</td>
<td></td>
</tr>
<tr>
<td>Category 3</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
<td></td>
</tr>
<tr>
<td>Any combination of chemicals from Items 25 to 27 where none of the items exceeds the quantities in columns 4 or 5 on their own</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
<td></td>
</tr>
<tr>
<td>Organic peroxides</td>
<td>Type A</td>
<td>5kg or 5L</td>
<td>50kg or 50L</td>
</tr>
<tr>
<td>Type B</td>
<td>50kg or 50L</td>
<td>500kg or 500L</td>
<td></td>
</tr>
<tr>
<td>Type C to F</td>
<td>250kg or 250L</td>
<td>2500kg or 2500L</td>
<td></td>
</tr>
<tr>
<td>Any combination of chemicals from Items 30 and 31 where none of the items exceeds the quantities in columns 4 or 5 on their own</td>
<td>250kg or 250L</td>
<td>2500kg or 2500L</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity</td>
<td>Category 1</td>
<td>50kg or 50L</td>
<td>500kg or 500L</td>
</tr>
<tr>
<td>Category 2</td>
<td>250kg or 250L</td>
<td>2500kg or 2500L</td>
<td></td>
</tr>
<tr>
<td>Category 3</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
<td></td>
</tr>
<tr>
<td>Any combination of chemicals from Items 33 to 35 where none of the items exceeds the quantities in columns 4 or 5 on their own</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion</td>
<td>Category 1A</td>
<td>50kg or 50L</td>
<td>500kg or 500L</td>
</tr>
<tr>
<td>Category 1B</td>
<td>250kg or 250L</td>
<td>2500kg or 2500L</td>
<td></td>
</tr>
<tr>
<td>Category 1C</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category 1</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>40</td>
<td>Corrosive to metals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Any combination of chemicals from Items 37 to 40 where none of the items exceed the quantities in columns 4 or 5 on their own</td>
<td>1000kg or 1000L</td>
<td>10,000kg or 10,000L</td>
</tr>
<tr>
<td>42</td>
<td>Unstable explosives</td>
<td>5kg or 5L</td>
<td>50kg or 50L</td>
</tr>
<tr>
<td>43</td>
<td>Unstable chemicals</td>
<td>5kg or 5L</td>
<td>50kg or 50L</td>
</tr>
</tbody>
</table>

**Notes**

1. In item 2, Gases under pressure with acute toxicity, category 4 only applies up to a LC50 of 5000 ppmV. This is equivalent to dangerous goods of Division 2.3.

2. Item 4 includes flammable aerosols.
### Table 1 – Example of Health Surveillance Required for Hazardous Chemicals

<table>
<thead>
<tr>
<th>Hazardous Chemical</th>
<th>Type of Health Surveillance</th>
<th>High Risk Exposure Work Activities</th>
</tr>
</thead>
</table>
| **Asbestos**       | a. Demography, occupational and medical history and health advice.  
                      b. Physical examination if indicated.  
                      c. Records of personal exposure. | Manufacture and installation of asbestos containing automotive products (e.g.: brake linings, gaskets).  
                                                                              Asbestos removal/demolition work in buildings.  
                                                                              Maintenance workers (e.g.: electricians, computer cabling installers) working in ceiling spaces of buildings where sprayed asbestos has not been removed, sealed or encapsulated. |
| **Cadmium**        | a. Demography, occupational and medical history.  
                      b. Health advice, including counselling on additional cadmium burden from smoking.  
                      c. Physical examination with emphasis on the respiratory system.  
                      d. Completion of a standardised respiratory questionnaire.  
                      e. Standardised respiratory function tests such as FEV₁, FVC and FEV₁/FVC.  
                      f. Urinary cadmium and β₂-microglobulin.  
                      g. Records of personal exposure. | Welding, soldering, oxy-cutting and smelting.  
                                                                              Welding or oxy-cutting of cadmium alloy and cadmium plate.  
                                                                              Use of cadmium silver alloys for silver soldering or brazing. |
<table>
<thead>
<tr>
<th>Hazardous Chemical</th>
<th>Type of Health Surveillance</th>
<th>High Risk Exposure Work Activities</th>
</tr>
</thead>
</table>
| **Inorganic chromium** | a. Demography, occupational and medical history and health advice.  
b. Physical examination with emphasis on the respiratory system and skin.  
Manual metal arc welding of high chromium steels. |
| **Inorganic mercury** | a. Demography, occupational and medical history and health advice.  
b. Physical examination with emphasis on neurological, renal and gastrointestinal systems and skin.  
c. Urinary inorganic mercury. | Laboratory work with mercury in closed or confined spaces.  
Use of mercury containing fungicides. |
| **Organophosphate pesticides (OP)** | a. Demography, occupational and medical history and health advice.  
b. Physical examination.  
c. Baseline estimation of red cell and plasma cholinesterase activity levels by the Ellman method. Estimation of red cell and plasma cholinesterase activity towards the end of the working day. | Handling used containers (e.g.: scrap recovery).  
Agricultural and horticultural activities (e.g.: mixing, loading and application where direct handling of chemical occurs). |
<table>
<thead>
<tr>
<th>Hazardous Chemical</th>
<th>Type of Health Surveillance</th>
<th>High Risk Exposure Work Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Polycyclic aromatic hydrocarbons (PAH)</strong></td>
<td>a. Demography, occupational and medical history.</td>
<td>PAH are organic compounds consisting of 3 or more fused benzene rings containing only 1 carbon and hydrogen.</td>
</tr>
<tr>
<td></td>
<td>b. Health advice, including recognition of photosensitivity and skin changes.</td>
<td>Asphalt road surfacing.</td>
</tr>
<tr>
<td></td>
<td>c. Physical examination if indicated.</td>
<td>Diesel emissions.</td>
</tr>
<tr>
<td></td>
<td>d. Records of personal exposure, including photosensitivity.</td>
<td></td>
</tr>
<tr>
<td><strong>Crystalline silica</strong></td>
<td>a. Demography, occupational and medical history and health advice.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Completion of a standardised respiratory questionnaire.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Standardised respiratory function tests such as FEV1, FVC and FEV1/FVC.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Chest X-ray, full size PA view.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Records of personal exposure.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excavation, earth moving and drilling plant operations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paving and surfacing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction labouring activities.</td>
</tr>
</tbody>
</table>
Hazardous Rated Chemical Register Report

No: WHSF 0079

<table>
<thead>
<tr>
<th>Location:</th>
<th>Building:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Supervisor of Area:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Storage location</th>
<th>Quantities held</th>
<th>Dangerous goods class</th>
<th>Hazardous Substances</th>
<th>SDS date of issue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>