

### NOTIFICATIONS FOR SCHEDULE 11 HAZARDOUS CHEMICALS AND ABANDONED TANKS -GUIDANCE MATERIAL

SAFEWORK NSW

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### WHY IS NOTIFICATION IMPORTANT?

### **EMERGENCY RESPONSE**

<u>Fire and Rescue NSW</u> (FRNSW) use the information you give about your hazardous chemicals to provide the most effective response to an emergency, and to make sure the highest level of protection is provided for people, property and the environment.

Off-site storage of information is particularly important when the on-site manifest cannot be accessed due to the fire/emergency.

It is also used by FRNSW to better develop their state-wide. By giving the most up-to-date and accurate information, FRNSW will be able to protect your site as best as they can.

### LEGAL REQUIREMENTS

The Work Health and Safety Regulation 2011 (WHS Regulation) provides for the notification of Schedule 11 hazardous chemicals that are used, handled or stored above certain quantities.

There is also a legal requirement to notify of the abandonment of an underground, partially underground or fully mounded storage tank that has been used to store flammable liquids or flammable gas.

Notification of Schedule 11 hazardous chemicals and abandoned tanks provides risk-based information to SafeWork NSW so we can apply resources and target compliance and enforcement actions to areas of greatest risk to health and safety.

### WHAT ARE NOTIFIABLE CHEMICALS?

All hazardous chemicals listed in Schedule 11 of the WHS Regulation are notifiable to SafeWork NSW if manifest quantities are exceeded.

Refer to Appendix B for details.

### WHO NEEDS TO NOTIFY?

A Manifest Quantity Workplace (MQW) refers to a workplace that uses, handles or stores Schedule 11 hazardous chemicals in quantities that exceed the manifest quantities in column 5, of Schedule 11 in the WHS Regulation. These sites store large quantities of chemicals and are required to notify.

### WHEN DO I NEED TO NOTIFY?

Notify when	You must submit	Type of notification	Fee
The site first becomes a MQW and you have not previously made a notification for this site.	<ul> <li>An online Notification of schedule 11 hazardous chemicals form.</li> <li>For each chemical storage area a list of the above placard quantities of notifiable chemicals.</li> <li>A site plan of the workplace.</li> </ul>	New	Yes. Refer to fees and charges.
You previously made a notification for this workplace, but there has been a significant change to the risks associated with using, handling or storing the Schedule II hazardous chemicals.  A significant change includes a change to the quantity, location or manner of storage of chemicals that would require the emergency services to respond differently to an incident.	<ul> <li>An online Notification of schedule 11 hazardous chemicals form.</li> <li>A list for each storage area of the bulk above placard quantities of all notifiable chemicals.</li> <li>A revised site plan.</li> </ul>	Amendment to a current notification – significant change option selected.	o Z
You wish to update details on your site plan.	• An online Notification of Schedule 11 hazardous chemicals form with the 'amendment' option selected. Follow the prompts until you reach the page for submission of the site plan and upload the new version.	Amendment to a current notification – significant change option selected.	o Z
You are no longer a MQW.	• An online Notification of schedule 11 hazardous chemicals form.	Amendment to a current notification – closure of record option selected.	o Z
There is an abandoned tank that is underground, partially underground or fully mounded and the tank was used to store flammable gases or liquids, but no longer does.	<ul> <li>An online Notification of schedule 11 hazardous chemicals form.</li> <li>If the site is still a MQW a revised site plan indicating the removed tank(s) must be submitted.</li> </ul>	Amendment – abandonment of tank option selected.	o Z
Your contact details have changed, including contact number, address, and emergency contact.	• An online Notification of schedule 11 hazardous chemicals form.	Amendment - contact details' option selected.	o Z
There is a new owner.	• An online <i>Notification of schedule 11 hazardous</i> chemicals form.	Amendment - new owner option selected.	0 Z
A notification acknowledgement is lost, stolen, destroyed, not received or there was a printing error and a replacement is required.	• An online Notification of schedule 11 hazardous chemicals form.	Amendment - new owner option selected.	Yes. Refer to fees and charges.

### WHAT DO I NEED TO NOTIFY?

All MQWs need to notify.

To determine if you are a MQW, refer to Schedule 11 of the WHS Regulation.

The *Notification of schedule 11 hazardous chemicals form* must be completed using the ADG Code classifications.

Use Appendix B to determine the equivalent ADG classification.

You are a MQW if the total quantity of any hazardous chemical exceeds the threshold in column 5 of Schedule 11 or the total of a combination of hazardous chemicals exceeds the threshold.

### For example a pool chemical retailer that stores:

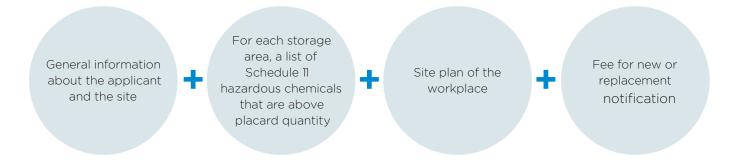
- 9,000 L of liquid pool chlorine (Hypochlorite Solution), Hazard category; Skin Corrosion
- 2,000 L Hydrochloric acid, Hazard category; Skin Corrosion
- Total of 11,000 L

The threshold for a combination of chemicals that meet the criteria for skin corrosion or corrosive to metals is 10,000 L or kg. This site is a MQW.

Note: Explosives subject to the *Explosives Act 2003 (NSW)* are not Schedule 11 hazardous chemicals and should not be notified using the hazardous chemical notification tool. Notification is through the Explosives licensing regime.

Your notification must include:

- 1. general information about the site
- 2. an inventory of all storage areas above placard levels detailing the types and quantities of notifiable chemicals
- 3. a site plan that contains all the elements described in the WHS Regulation Schedule 1
- 4. payment of a fee.



### GENERAL INFORMATION

General information is collected as part of the notification form. This information includes:

- · the name of the person conducting the business or undertaking like the registered business name
- the address of the workplace
- the date the manifest was prepared or last amended
- business hours and after hours telephone numbers for at least two persons who may be contacted if there is a notifiable incident at the workplace
- previous occupiers details if known.

Any previous reference number for the notification of schedule 11 hazardous chemicals or Notification of Dangerous Goods on premises such as NDGXXXXXX or 35/ XXXXXX.

This information helps us in maintaining contact with the person conducting the business or undertaking, as well as supporting FRNSW in the response to any emergency situations.

### 2. DETAILS OF ALL ABOVE PLACARD QUANTITIES OF NOTIFIABLE CHEMICALS

For each storage or handling area, a list of all Schedule 11 hazardous chemicals that exceed the placard quantity. This includes bulk storage such as tanks, process vessels, pipelines and equipment. This information must include details about the type of storage such as:

### Storage identifier

A short (preferably 4 digit) identification number or code you use for the storage area (depot), and/or container (this should be cross referenced in the plan). For example T1 for Tank 1.

### Type of storage

Descriptor for the store or handling system - for example above ground tank, process vessel.

**Note:** for a fixed vertical tank used to store fire risk hazardous chemicals (as defined under the WHS Regulation) - the diameter of the tank.

### Quantity

When calculating quantities for placarding, manifests and notification the following should be considered:

- All containers other than those that are free from hazardous chemicals residues should be included in the calculation.
- Il containers should be assumed to be full, even if they are not.
- Then determining the aggregate, as is required for mixed hazard classification storage, convert all volumes to litres and all mass measurements to kilograms. Then add the number of litres to the number of kilograms to arrive at the aggregate.
- The quantity of gas is always based on the water capacity of the container in litres.
- The maximum quantity for bulk storage container is the maximum capacity of the container or design capacity.
- The typical quantity is the quantity you usually store or handle in the storage location on your site.

Note: Refer to Appendix D for a description list of bulk chemical storage types.

### Information required about the notifiable chemical

- UN number
- proper shipping name
- class, division and if applicable the packing group.

### Notes:

- This information may be found in the Safety Data Sheet in particular section 14 for each chemical. Refer to Appendix C for an example of a listing of Schedule 11 chemicals.
- If you are notifying diesel or any other C1 combustible liquid, please use 00C1 in the UN number field on the online form.
- 'Goods too dangerous to be transported' as stated in the ADG code, must be notified for an unstable explosive, organic peroxide type A or self-reactive substance type A.

### Non workplace

A non-work place that exceeds the manifest quantities for Schedule 11 hazardous chemicals is considered a MQW if they meet the conditions of clause 328 of the WHS Regulation.

### In transit notifiable chemicals

In this guide 'in transit' refers to chemicals that are not opened or used, and are at the site for a maximum of five consecutive days.

If the amount and type of notifiable chemicals in transit are not a frequent or regular presence at the work place and the type and quantity is constantly changing, they are not required to be notified.

You must attach a copy of the transport documents to your on-site manifest whilst the goods are on-site. In transit storage areas must be marked on the site plan that is included with your notification.

### Example

A large logistics company unloads large semitrailers and stores palletized goods for between 1-2 days before loading into rail carriages. The containers are not opened or used. In such a transport depot, the nature and quantities of chemicals can vary wildly throughout the day as freight containers, trucks and/or trains come and go. The site is a MQW and the goods include Schedule 11 hazardous chemicals that often exceed the placard quantity but the type and quantity changes with each load. The hazardous chemicals are always stored in a dedicated storage area with the appropriate placards. The dedicated in transit storage area should be clearly marked on the site plan that is included with the notification. The ADG Code shipping documents provide the most up to date information and a compilation of these should be included as part of the on-site manifest and made available to emergency services.

Where the hazardous chemicals are in transit and there is a significant or frequent presence at the workplace, notification of type and quantity in addition to identification on the site plan is required.

### Example

A Liquefied Petroleum Gas (LPG) depot has a LPG tanker that is parked on site every night that contains some LPG. The site is a MQW. The tanker should be listed as a store on the notification form and the details of the hazardous chemical (LPG) and the maximum capacity of the tanker should be included. The tanker parking area needs to be identified on the site plan.

### Significant change

An amendment to the notification is required when there is a significant change in the type or quantity of Schedule 11 hazardous chemicals that are used, stored and handled on the premises. A significant change is one where a hazard is introduced or eliminated and there is a substantive change in the risk, or the emergency services may need to respond differently to an incident.

Significant changes could include:

- the introduction or removal of a storage area
- a substantial change in the quantity in an area, for example ± 20 per cent, or a change exceeding the placard quantity
- any change in the hazard classification of chemicals stored, or any change in the class or packing group of dangerous goods. For example, if Packing Group I goods are introduced where there were previously only Packing Group II or III.

### 3. SITE PLAN OF THE WORKPLACE

The purpose of the site plan of the work place is to identify the places, buildings and structures on the premises where hazardous chemicals are used, stored and handled.

The plan should also include details of all significant facility and surrounding area features. It should be easy for emergency services personnel to read.

The plan of the premises must adequately illustrate the details required by the WHS Regulation, and more than one plan may be needed for complex sites. An example of a site plan is provided at Attachment E.

The site plan is to be submitted as an attachment to your notification and you may submit a number of these pages as required. The types of files accepted are: jpg, gif, bmp, png, pdf, doc, docx, xls, xlsx. The file size limit is 20 mb.

The site plan must:

- 1. Be drawn to scale and display the scale used, be legible to emergency services even in dimly lit conditions.
- 2. Show the location of containers and other storage of hazardous chemicals in bulk and provide their identification details for example DGT 3.
- 3. Show the location of storage areas for packaged hazardous chemicals and Intermediate Bulk Containers and provide their identification details for example PS3.
- 4. Show the location where hazardous chemicals are manufactured or generated and provide their identification details for example MA 2.
- 5. Show the location of areas designated for chemicals that are 'in transit' for example ITA 1.
- 6. Describe in words the location of the things referred to in items 1 to 4 above.
- 7. Use a legend to indicate what the ID numbers and codes stand for.
- 8. Show the location of the main entrance and other places of entry to and exit from the workplace.
- 9. Show the location of any essential site services, including fire services and isolation points for fuel and power.
- 10. Show the location of all drainage systems.
- 11. Location of the manifest.
- 12. Show and provide a description of adjoining workplaces, occupancies or sites for example car repair shop and furniture factory.

- 13. Show the direction of 'north'.
- 14. Latitude and longitude data available from (insert link to six maps).
- 15. The notification reference number for example NDG012345.

### Note:

- Certain sites have specific features that should also be included on the site plan so that emergency services can best manage an incident such as:
- internal roadways, large buildings or structures
- adjacent environmentally sensitive areas and watercourses
- · steep sloping site or other topographical features that may impact incident management
- restrictions to accessibility
- specialised emergency resources and equipment like deluge systems
- public street names next to the site, or the nearest public road access point where the facility is not directly fronting a public road
- · location of buildings, amenities, structures and internal roadways for large sites.

### 4. PAYMENT OF FFF

Refer to the schedule of fees online.

### HOW DO I NOTIFY?

To notify you need to complete our online form.

You will be able to complete your notification including the submission of your plan and payment of any fees.

### HOW TO NOTIFY ABANDONED TANKS

We need to be notified when an underground, partially underground or fully mounded tank that has previously contained a flammable liquid or a flammable gas has been abandoned, because these tanks must be decommissioned appropriately.

They pose significant risks to people, property and the environment if this is not done. Flammable vapour present in the tanks can be ignited like a spark, and result in fire and explosion. Leaking tanks can lead to pollution of the environment.

When the tank and the associated pipework have been removed or no longer contain hazardous chemicals, placards and signs should be removed and the manifest and its associated documentation such as the site plan must be updated.

Any work on existing or abandoned underground tanks or associated pipework is potentially dangerous where residual levels of the flammable gases or liquids and vapours are present. Introducing an ignition source may cause an explosion unless suitable procedures are adopted.

Tar-like deposits and sludge may have accumulated in the tank and pipe work. Flushing with water may not remove them and vapour testing may not detect this. Exposure of these deposits to air and sunlight under normal temperatures, or work involving heat like the use of grinders or oxy-acetylene cutting), may release vapours creating a potential explosion hazard.

If you no longer intend to use the tank, a competent person should be engaged to:

- Remove the tank and associated pipework.
- If it is not reasonably practicable to remove the tank, you must ensure that the tank is without risks to health and safety. This can be achieved by filling the tank with an inert solid material.

Examples of when it may be not be reasonably practicable to remove a tank include those where the removal would damage:

- the supporting structure of an existing building
- an in service tank
- sub surface pipework or electrical conduits.

Evidence that the tank has been appropriately decommissioned includes a copy of a letter or certificate from:

- An unrestricted demolition licence holder with chemical demolition authorisation for the decommissioning of a tank that contained a flammable liquid.
- A gas engineer or gas fitter as a competent person for the decommissioning of a tank that contained a flammable gas.

You can submit this using documentation using the online form as part of the notification.

### Further information:

- Refer to Australian Standard AS 1940-2004: The storage and handling of flammable and combustible liquids.
- Refer to Australian Standard AS 1596-2014: The storage and handling of LP Gas.
- Refer to <u>Australian Standard AS 4976-2008</u>: The removal and disposal of underground petroleum storage tanks.
- SafeWork NSW safety alert Removing underground tanks (catalogue no. WC01188).

### WHAT OTHER OBLIGATIONS DO MQWS HAVE?

### **MANIFEST**

All MQWs must develop and maintain an onsite manifest. The manifest contains essential information for emergency services of the types, quantities, and locations of hazardous chemicals at a workplace.

### Contents of a manifest

The manifest must contain information as prescribed in Schedule 12 of the WHS Regulation including:

- general information such as company name, address, contact details, and date manifest was prepared or last amended
- list of all Schedule 11 hazardous chemicals above placard quantities including identification of chemical, actual quantity, storage capacity and method of storage.
- a site plan of the workplace must include all the elements prescribed in Schedule 12 such as identifying the places, buildings and structures where Schedule 11 hazardous chemicals are used or stored. The same site plan(s) as included with the notification should be available.

### Location of manifest

The manifest must be kept on the premises in a place easily accessible to FRNSW at all times and available for inspection under the WHS Act.

The location of the manifest will be dependent on the layout of the building, facility or site, but typically is located at the first suitable location for arriving vehicles. The following are acceptable locations for the manifest:

- at the hydrant booster assembly if fitted (this is the preferred location)
- at main site entrance adjacent to the 'HAZCHEM' outer warning placard
- inside the security gatehouse or similar if staffed 24 hours 7 days
- at alternative vehicular entrances adjacent to the 'HAZCHEM' outer warning placard (where provided).

The manifest should be kept within weather proof container secured with a 003 lock to prevent unauthorised access that is a locked box. FRNSW can assist in determining a suitable location for the manifest container.

The manifest container should be readily identifiable and prominently labelled. FRNSW prefers the container to be coloured red with white 'HAZMAT Manifest' lettering, minimum 40 mm height, across the front of the container.

### Contents of the manifest box

In an emergency situation the first responder can be overloaded with information when first attending on site. The manifest box information should enable the emergency services to locate hazardous chemical storage areas and make contact with a site representative about the site. The contents of the manifest box should include:

- Site details such as PCBU name and site address.
- Emergency contacts.
- Table with location and quantity details of all notifiable chemicals above placard quantities (refer to Appendix C).
- Site plan FRNSW require two A3 laminated copies of the site plan to be provided with each manifest: The site plan must be scaled and clearly legible to firefighters even in dimly lit conditions.

### Emergency plan

If you store, handle or process hazardous chemicals (dangerous goods) that exceed the manifest quantity, you must also develop a written emergency plan and lodge a copy with Fire and Rescue NSW **online**.

The code of practice for managing the work environment and facilities has more information about emergency plans.

### Further information

If you have any further enquiries about your notification requirements, please contact us on 13 10 50 or operations@safework.nsw.gov.au

### APPENDIX A - DEFINITIONS

Term D	Definition				
	The tank is taken to be abandoned if:  the tank has not been used to store flammable gases or flammable liquids for two years, or  the person does not intend to use the tank to store flammable gases or flammable liquids again.				
go	The Australian Dangerous Goods (ADG) Code for the transport of dangerous goods by road or rail. The ADG Code is approved by the National Transport Council www.ntc.gov.au				
_	Any quantity of a hazardous chemical that is: in a container with a capacity exceeding 500 L or net mass of more than 500 kg, or if the hazardous chemical is a solid, an undivided quantity exceeding 500 kg.				
Class or division Th	he class or division assigned to dangerous goods under the ADG Code.				
goods ch ha Co sp	Dangerous goods are substances or articles that, because of their physical, chemical (physiochemical) or acute toxicity properties, present an immediate lazard to people, property or the environment. These are listed in the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) pecified in Table 3.2). There are nine classes of dangerous goods, based on their lazardous properties, some of which are further divided into divisions.				
Goods too Goods too be transported (GTDTBT)	Goods listed in Appendix A of the ADG Code.				
Fire Risk Is Hazardous Chemical					
ar	Within the meaning of the GHS is a gas with a flammable range with air at 20°C and a standard pressure of 101.3 kPa. Note only flammable gas category 1 appears in Schedule 11 of the WHS Regulation.				
liquid No	Vithin the meaning of GHS is a liquid with a flash point of no more than 93°C. Note that flammable liquids are categorised 1-4 as per the table below and all appear in Schedule 11 of the WHS Regulation.				
	Category Criteria				
	1 Flash point < 23°C and initial boiling point ≤ 3°C.				
	2 Flash point < 23°C and initial boiling point > 35°C.				
	3 Flash point ≥ 23°C and ≤ 60°C.				

Term	Definition
GHS	Is the Globally harmonized system of classification and labelling of chemicals, third revised edition.
Hazardous chemicals	A substance, mixture or article that satisfies the criteria for a hazard class in the GHS (including a classification referred to in Schedule 6) as defined in the WHS Regulation. Note the following hazard classes are excluded where this is the only hazard class applied and are not considered hazardous chemicals for the purpose of the WHS legislation.  • Acute toxicity - oral - category 5.  • Acute toxicity - dermal - category 5.  • Acute toxicity - inhalation - category 5.  • Skin corrosion/irritation - category 3.  • Serious eye damage/irritation - category 3.  • Aspiration hazard - category 2.  • Flammable gas - category 2.  • Acute hazard to aquatic environment - category 1, 2 and 3.  • Chronic hazard to aquatic environment - category 1, 2, 3 and 4.  • Hazardous to the ozone layer.
Hazard class	The nature of a physical, health or environmental hazard class under the GHS.
In transit (hazardous chemicals)	<ul> <li>A load of hazardous chemicals for transport that:</li> <li>is supplied to, or stored at, a workplace in containers that are not opened at the workplace</li> <li>is not used at the workplace</li> <li>is kept at the workplace for not more than five consecutive days.</li> </ul>
Manifest	A document containing or compiling key information about the storage and handling of Schedule 11 hazardous chemicals at a workplace including the location, storage type and quantity. The manifest must include the information required by Schedule 12 of the WHS Regulation.
Manifest quantities	The manifest quantity is the quantity specified in Schedule 11, column 5 of the WHS Regulation. Possession of a manifest quantity requires notification.
Packaged hazardous chemical	Is a Schedule 11 hazardous chemical in a container with:  • a capacity not exceeding 500 L, or  • a net mass not exceeding 500 kg.  This means the complete product, consisting of the goods and their packaging for transport.
PCBU	A person conducting a business or undertaking.
Quantity	<ul> <li>for solids in a package, the quantity is the net mass (in kilograms) in the package</li> <li>for solids in a tank, the quantity is the mass (in kilograms) the tank is designed to hold</li> <li>for solids not in a tank or package for example heap or pile, the quantity is the undivided mass (in kilograms)</li> <li>for liquids in a package, the quantity is the net capacity (in litres) of the package</li> <li>for liquids in a tank, the quantity is the designed capacity (in litres) of the tank</li> <li>for class 2 dangerous goods (gases) in packages or tanks, or pipework the quantity is the total capacity (water capacity in litres).</li> </ul>
Schedule 11	List of manifest and placard quantities of hazardous chemicals or groups of hazardous chemicals under the WHS Regulation.
UN number	Is a four digit number assigned under the ADG Code as a unique identifier for the hazardous chemical.

# APPENDIX B - HAZARDOUS CHEMICALS - PLACARD AND MANIFEST QUANTITIES INFORMATION

(Refer to the NSW Work Health and Safety Regulation 2011, Schedule 11)

Item		Description of hazardous chemical	Equivalent dangerous goods class/	Placard	Placard to display	Manifest quantity
	GHS hazard class	GHS hazard type/category	division/packing group (Note 1)	quantity	(Note 2)	
_	Flammable gases	Category 1	2.1 (except aerosols)	200 L	FLAMMABLE	5,000 L
N	Gases under pressure	with acute toxicity, categories 1, 2, 3 or 4 Note - Category 4 only up to LC50 of 5,000 ppmV	2.3	50 L	TOXIC	200 L
М		with skin corrosion categories 1A, 1B or 1C	2.3/8	50 L	TOWC CORROSVE	500 L
4		Aerosols	2.1 or 2.2	5,000 L	FLAMMABLE GAS 2 2 2 2 2 2 3 3 4 6 1 6 1 6 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1	10,000 L

Item	Description	Description of hazardous chemical	Equivalent dangerous goods class/		Placard to display	Manifest quantity
	GHS hazard class	GHS hazard type/category	division/packing group (Note 1)	quantity	(Note 2)	
ΓU		Not specified elsewhere in this table	2.2 (except aerosols) or 2.2/5.1 (oxidizing gas)	1,000 L	WON-TIAMMENT CONDIDING CONDIDING CAS	10,000 L
9	Flammable liquids	Category 1	3 PG I	20 L		200 L
_		Category 2	3 PG II	250 L		2,500 L
$\infty$		Category 3	3 PG III	1,000 L		10,000 L
0		Any mix of chemicals from items 6-8 where none of the items exceeds the quantity for placards or manifests on their own	M	1,000 L	FLAMMABLE LIQUID	10,000 L
10		Category 4	Combustible Liquids (flash point < 93°C)	10,000 L (Note 3)	COMBUSTIBLE LIQUID	100,000 L (Note 3)
=	Self-reactive substances	Type A	Goods Too Dangerous To Be Transported (GTDTBT)	5 kg or 5 L	UNSTABLE GOODS TOO DANGEROUS TO THANSPOHT	50 kg or L
12		Type B	4.1	50 kg or L		500 kg or L
13		Type C - F	4.1	250 kg or L		2,500 kg or L
7	Flammable solids	Category 1	4.1 PG II	250 kg	SOLID	2,500 kg
15		Category 2	4.1 PG III	1,000 kg	t	10,000 kg
9		Any mix of chemicals from items 12–15 where none of the items exceeds the quantity for placards or manifests on their own	4,1	1,000 kg or L		10,000 kg or L

Item		Description of hazardous chemical	Equivalent dangerous goods class/	Placard	Placard to display	Manifest quantity
	GHS h	GHS hazard type/category	division/packing group (Note 1)	quantity	(Note 2)	
17	Pyrophoric liquids and pyrophoric solids	Category 1	4.2 PG I	50 kg or L		500 kg or L
8	Self heating substances and	Category 1	4.2 PG II	250 kg or L	SPONTANEOUSLY	2,500 kg or L
19	mixtures	Category 2	4.2 PG III	1,000 kg or L	4	10,000 kg or L
50		Any mix of chemicals from items 17-19 where none of the items exceeds the quantity for placards or manifests on their own	4.2	1,000 kg	SPONTANEOUSLY COMBUSTABLE	10,000 kg or L
21	Substances which in contact	Category 1	4.3 PG I	50 kg or L		500 kg or L
22	with water emit flammable gas	Category 2	4.3 PG II	250 kg or L	DANGEROUS	2,500 kg or L
23		Category 3	4.3 PG III	1,000 kg or L	4	10,000 kg or L
24		Any mix of chemicals from items 21–23 where none of the items exceeds the quantity for placards or manifests on their own	4.3	1,000 kg or L		10,000 kg or L
25	Oxidising liquids and Oxidising	Category 1	5.1 PG I	50 kg or L		500 kg or L
26	solids	Category 2	5.1 PG II	250 kg or L	OXIDIZING	2,500 kg or L
27		Category 3	5.1 PG III	1,000 kg or L	AGENT 5.1	10,000 kg or L

Placard to display Manifest quantity (Note 2)	10,000 kg or L	UNSTABLE GOODS OO DANGEROUS THANSPORT	500 kg or L	ORGANIC 2,500 kg or L	2,500 kg or L		500 kg or L	500 kg or L 2,500 kg or L	70,0
Placard Placard 1 quantity (Note 2)	1,000 kg or L	5 kg or L	50 kg or L	250 kg or L	250 kg or L		50 kg or L	50 kg or L 250 kg or L	50 kg or L 250 kg or L 1,000 kg
Equivalent dangerous goods class/ division/packing group (Note 1)		TBT					- I- D.	- D. S.	
of hazardous chemical GHS hazard type/category	Any mix of chemicals from 5.1 items 25-27 where none of the items exceeds the quantity for placards or manifests on their own	Type A GTD	Type B 5.2	Type C-F 5.2	Any mix of chemicals from 5.2 items 30-31 where none of the items exceeds the	quantity for placards or manifests on their own	quantity for placards or manifests on their own Category 1 6.1 PG I		r placards or in their own
GHS h		Organic peroxides					Acute Toxicity	Acute Toxicity	Acute Toxicity
Item	78	70	30	21	32		33	8 8 4 8	8 8 8 8 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9

Item	Description	Description of hazardous chemical	Equivalent dangerous goods class/	Placard	Placard Placard to display	Manifest quantity
	GHS hazard class	GHS hazard type/category	division/packing group (Note 1)	quantity	(Note 2)	
37	Skin corrosion	Category 1A	8 PG I	50 kg or L		500 kg or L
38		Category 1B	8 PG II	250 kg or L	CORROSIVE	2,500 kg or L
39		Category 1C	8 PG III	1,000 kg or L	8	10,000 kg or L
04	Corrosive to metals	Category 1	8 PG III	1,000 kg or L		10,000 kg or L
14		Any mix of chemicals from items 37-40 where none of the items exceeds the quantity for placards or manifests on their own	$\infty$	1,000 kg or L		10,000 kg or L
42	Unstable explosives		GTDTBT	5 kg or 5 L		50 kg or L
4 5		Any mix of chemicals from items 11, 29 and 42 where none of the items exceeds the quantity for placards or manifests on their own	GTDTBT	5 kg or 5 L	UNSTABLE GOODS TOO DANGEROUS TO TO T	50 kg or L

Note 1. This information is provided as a guide only. Confirm this information when the manufacturer's or supplier's SDS indicates the GHS hazard class and category for the particular hazardous chemical or mixture based on the material properties Note 2: The placard pictured in 'Placard to display' column is the placard which should be displayed on the entrance to the packaged goods storage area as required by Regulation 350 and Schedules 11 and 13 of the WHS Regulation. The combustible liquid placard for Flammable Liquids Category 4 is for these goods in isolation from other flammable liquids (Categories 1-3). For outer warning placard and placards to be displayed on bulk containers refer to Schedule 13 of the WHS Regulation.

liquids categories 1, 2 or 3 must be determined as if the flammable liquid category 4 had the same classification as the flammable liquid in the spill compound with the lowest flash point, for example - for placarding Note 3: For the purposes of this table, if a flammable liquid category 4 is used, handled or stored in the same spill compound as 1 or more flammable liquids of categories 1, 2 or 3, the total quantity of flammable and manifest purposes, a spill compound containing 1,000 L of flammable liquid category 1 and 1,000 L of flammable liquid category 1.

### APPENDIX C - DESCRIPTORS OF BULK CHEMICAL STORAGE TYPES

Storage type	Description/comments
Storage area	
Warehouse	A structure where goods are stored.
Refrigeration plant	A plant that uses gas or liquid to remove heat.
Room inside a building	A room designed for storing hazardous chemicals.
Shipping container	A shipping container including an ISO (International Standards Organisation) container that has been designed or modified to store hazardous chemicals.
Underground cavern	A sealed and deep underground void for storage of hazardous chemicals including liquefied gases.
Refrigerated shipping container	Shipping containers with a refrigeration device to store hazardous chemicals at low temperatures.
Area-empty uncleaned tanks	A storage area for tanks that have not been tested and declared free from hazardous chemicals.
Stock pile	Loose material not in a container.
Bulk containers	
Above ground tank (AGT)	Above ground container, other than a package or IBC, intended for the storage of hazardous chemicals in the form of a gas or a liquid in bulk. Includes fittings, closures and any other equipment that forms part of the container. If used for flammable liquids it is a tank described in AS 1692 and defined in AS 1940.
Underground storage tank (UST)	An underground, partially or fully mounded tank used to store hazardous chemicals.
Portable tanks	Portable tanks including ISO tanks. It Includes self-bunded or double walled/skinned tanks.
Silo	A predominantly vertical structure proofed against weather and vermin typically for storing grain.
Intermediate bulk container (IBC)	A rigid or flexible portable packaging for the transport or storage of hazardous chemicals as defined in the ADG Code 7.3.
Storage depots/packa	aged store areas
Cylinder store	Storage area for cylinders containing hazardous chemicals where cylinders are defined in the relevant Australian Standard.
Cylinders in use	Cylinders of hazardous chemicals connected for use.
Decanting cylinders	Supply cylinders used to fill smaller cylinders on site.
Cabinets: flammable liquids	Cabinets purpose built or modified to store flammable liquids.
Cabinets: corrosives	Cabinets purpose built or modified to store corrosives.
Cabinets: toxics	Cabinets purpose built or modified to store toxics.
Cabinets: organic peroxides	Cabinets purpose built or modified to store organic peroxides.

Storage type	Description/comments
Drum store	An area for storing drums of hazardous chemicals.
Non-roofed store	An outdoor store without a roof.
In process/manufactu	ire
Process piping	Pipework that is used to convey hazardous chemicals as part of a process.
Process vessel	A vessel used to complete a process involving hazardous chemicals, such as separating a product or substance, combining two or more products, or breaking a product down.

### APPENDIX D - EXAMPLE OF A MANIFEST

This example is provided to assist the PCBU to develop a manifest that meets the requirements of Schedule 12 of the Work Health and Safety Regulation 2011. The format/layout used here is not mandatory but shows the information to be included. The amount of information will depend on the size and complexity of the workplace.

The manifest is to be a readily available document presenting the up-to-date hazardous chemical information clearly and accurately to emergency services for use in an emergency situation.

### MANIFEST OF SCHEDULE 11 HAZARDOUS CHEMICALS

Person conducting the business or undertaking (PC	BU) XYZ CHEMICALS PTY LTD
Address of premises	123 Jackson Street, Sydney, NSW 2000
Date of preparation	1st January 2015

### **Emergency contacts**

Name	Position	Telephone
B Wright	Production Supervisor	B/H: 0453 345 378 A/H: 07 3425 6345
A Citizen	Safety Manager	B/H : 0452 454 733 A/H : 07 3029 4563

### Hazardous chemicals stored in bulk (not in container, for example stockpile)

Storage area	Proper shipping name	UN No.	Class/ Division	PG	Туре	Design capacity	Diameter	Typical quantity
N/A								

### Hazardous chemicals stored in tanks

Storage area	Proper shipping name	UN No.	Class/ Division	PG	Туре	Design Diameter capacity	Typical quantity
DG T1	Methanol	1230		П	UST	30,000 L	20,000 L
DG T2	Abandoned tank	n/a			UST	30,000 L	0
DG T3	Petroleum gases, liquefied	1075			AGT	5,000 L	3,000 L
DG T4	Combustible liquid	00C1	n/a	n/a	AGT	10,000 L See note	7,000 L

Note: tank diameter required for vertical above ground tanks storing fire risk hazardous chemical (does not apply to combustible liquids).

AGT = above ground tank

UST = underground storage tank

n/a = not applicable

### Packed store 1

Storage area	Proper shipping name	UN No.	Class/ Division	PG	Туре	Max capacity	Typical quantity
PSI1	Chlorine	1017	2.3		Cylinders in use	70 L	70 L

### Packed store 2

Storage area	Proper shipping name	UN No.	Class/ Division	PG	Туре	Max capacity	Typical quantity
PS2	Organphosphorus pesticide, liquid, toxic	3018	6.1	II	Roofed store	2,500 L	2,500 L
PS2	Toxic liquid, organic, n.O.S	2810	6.1	Ш	Roofed store	12,000 L	12,000 L

### Packed store 3

Storage area	Proper shipping name	UN No.	Class/ Division	PG	Туре	Max capacity	Typical quantity
PS3	Carbon disulphide	1131	3		Roofed store	200 L	200 L
PS3	Isopropanol	1219	3	П	Roofed store	4,000 L	4,000 L
PS3	Kerosene	1223	3	Ш	Roofed store	8,000 L	8,000 L
PS3	Combustible liquid	OOCI			Roofed store		2,000 L

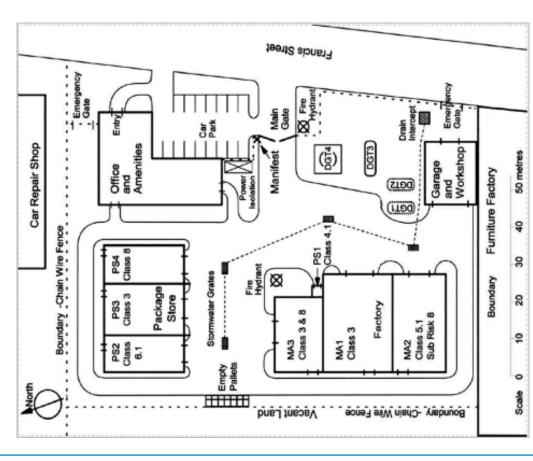
### Packed store 4

Storage area	Proper shipping name	UN No.	Class/ Division	PG	Туре	Max capacity	Typical quantity
PS4	Sodium hydroxide solution	1824	8	II	Roofed store	4,000 L	4,000 L
PS4	Sodium hydroxide solution	1824	8	Ш	Roofed store	8,000 L	8,000 L

### Manufacturing area

Storage area	Proper shipping name	UN No.	Class/ Division	PG	Туре	Max capacity	Typical quantity
MA1	Isopropanol	1219	3	П		4,000 L	2,500 L
MA2	Sodium hydroxide solution	1824	8	II		2,800 L	1,400 L
MA2	Coumarin derivative pesticide, liquid, toxic	3026	6.1	III		1,200 L	600 L

## APPENDIX E - EXAMPLE MANIFEST SITE PLAN



Below is a list of what needs to be added to the map

- 1. Show the location of containers and other storage of hazardous chemicals in bulk and provide their identification details (for example, DGT 3).
- Show the location of storage areas for packaged hazardous chemicals and IBCs and provide their identification details (for example, PS3).
- Show the location where hazardous chemicals are manufactured or generated and provide their identification details (for example, MA 2)
- 4. Show on map areas which have been designated for chemicals that are in transit' (for example, ITA 1).
- 5. Describe in words the location of the things referred to in items 1 to 4 above (for example, the chemicals at DGT 3 are located [insert where] and can be reached from the main gate by going [where]).
- 6. Use a legend to indicate what the ID numbers and codes stand for.
- 7. Show on the map the location of the main entrance and other places of entry to and exit from the workplace.
- 8. Show on site map any essential site services, including fire services and isolation points for fuel and power.
- 9. Show on site map all drainage systems.
- 10. Show on site map where the manifest is located.
- 11. Show and provide a description of adjoining workplaces, occupancies or sites (for example, car repair shop and furniture factory).
- Show on site map the location of all other buildings, amenities, fences, car parks and storage areas.
- 13. Include a direction indicator for true north.
- 14. Ensure the site name and address details are recorded on the site plan along with the date it was prepared/revised.
- 15. Include a description of the activities carried out in adjoining sites or premises.

Legend

ABC Chemicals Pty Ltd Lot 888 Jumpstart Road Kentstone WA 6888 Date prepared: 12 June 2008 Plan no.: ABCO01

PS - Package stores MA - Factory manufacturing areas DGT - Storage tanks areas