

Example hazardous chemical manifest for a service station

The Work Health and Safety Regulation 2011 (the WHS Regulation) requires the person conducting a business or undertaking (PCBU) to prepare a manifest of Schedule 11 hazardous chemicals if a prescribed manifest quantity is exceeded (s.347). This manifest must be kept at the workplace in a place determined in agreement with Queensland Fire and Emergency Services (e.g. in a HAZMAT box). When a manifest is required, the PCBU must also notify (s.348) Workplace Health and Safety Queensland (WHSQ) and provide a copy of the manifest with the notification. The notification can be made using [Form 73: Notification of manifest quantity workplace](#). This example manifest and supporting information is provided to assist the PCBU of a service station to prepare a compliant manifest under the WHS Regulation.

When a Schedule 11 hazardous chemical on site exceeds a prescribed manifest quantity, the site is known as a manifest quantity workplace (MQW). A retail fuel outlet will typically store in excess of the prescribed manifest quantity for the various commercially available fuels as shown below.

Product	GHS hazard classification ¹	Prescribed quantity ²	
		Manifest	Placard
Petrol (all tanks)	Flammable liquid category 2	2500 L	250 L
Diesel (all tanks)	Flammable liquid category 4	100,000 L	1000 L
LPG (all tanks and cylinders)	Flammable gas category 1	5000 L (WC)	200 L (WC)

Determining the quantity

Determine the total capacity of all the aboveground/underground storage tanks on site for petrol (ULP, PULP, E10, having the same globally harmonised system for the classification and labelling of chemicals (GHS) hazard classification). The capacity of each tank is the 'safe fill level' as determined on the tanks dip stick or tank gauging device. Similarly for diesel, determine the capacity of all the diesel tanks on site. Only one prescribed manifest quantity needs to be exceeded to trigger the mandatory requirement to prepare a manifest and notify WHSQ.

For LPG storage, determine the water capacity (WC) of each tank. This information may be found on a specifications plaque on the tank or other paperwork from the tank's supplier. The maximum quantities of any 'Swap n Go' cylinders, and/or 210 kilogram cylinders used to decant LPG for customers or to fuel cooking appliances must be included in the total quantity for the workplace. The quantity of LPG in cylinders is normally stated in kilograms.

To determine the approximate WC for comparing to the prescribed quantity, an approximate conversion is to multiply the amount in kilograms by 2.35 for the equivalent WC. For example, 1 kilogram LPG is equivalent to 2.35 litres WC, or 190 kg LPG is equivalent to 447 litres as a guide. To confirm the quantities, always check with the supplier.

¹ Always confirm the hazardous chemical classification using the manufacturer's product safety data sheet.

² The prescribed quantity is dependent on the product's chemical hazard classification under the GHS.

Preparing the manifest

The hazardous chemical manifest is a document that includes specific information to assist emergency services such as:

- emergency contact information
- the quantity and locations of hazardous chemicals
- stop switches
- a site plan to show where the above items are located - any quantity of a hazardous chemical above the prescribed placard quantity in any one location must be listed and shown on the site plan
- other useful information for an emergency responder.

The following example manifest will assist the PCBU to prepare a manifest that is compliant with the regulatory requirements (refer to Schedule 12 of the WHS Regulation for what must be included in a manifest). There are a number of examples to show a range of circumstances which may or may not apply – tailor the content to fit the workplace. Fill in the relevant information and delete any of the rows or tables that do not apply. The plan incorporates various scenarios that may be expected at service station sites, however it is not exhaustive. There may be other hazardous chemicals that are stored or handled on site that have not been shown or listed in the example provided.

The site plan may be hand drawn provided it is to scale and the items marked in **red** in the sample plan are included in the site plan. Include any other information which is considered to be useful for the emergency services but avoid too much additional information. A hazardous chemical manifest will benefit the workplace in the event of an emergency and help emergency responders protect life and property and minimise environmental clean-up and recovery costs. Hazardous chemical manifests should be reviewed periodically to maintain accuracy.

A copy of the hazardous chemicals manifest must be submitted with the [Form 73: Notification of manifest quantity workplace](#). If there are any significant changes (e.g. new tank or change in products), you should renotify and submit an updated manifest. The most up to date manifest with accurate contact details should be kept in a red waterproof container at the main entrance/s to the site.

Tips for preparing a manifest:

- Plans printed in A3 size help improve visual clarity, improving the readability.
- Laminating documents will help to protect them from damage by vermin or weather.
- Construction plans are generally not suitable as they often contain more information than that required by emergency responders and often appear cluttered and may not accurately reflect what is currently on site (e.g. abandoned tanks, package stores, gas cylinders).
- It is useful to include a satellite image of the site to provide an overview of the location. Images can be obtained via mapping software such as Google Maps, Google Earth, Queensland Globe and Near Maps location.
- Refer to Manifest requirements for hazardous chemicals under the *Work Health and Safety Act 2011* available at www.worksafe.qld.gov.au .

The following is a list of the information required in the hazardous chemical manifest in accordance with Schedule 12 of the WHS Regulation:

(1) Manifest – General information – WHS Regulation, Schedule 12, s. 1	
The manifest must include the following:	
1.1	The name of the person conducting the business or undertaking (PCBU).
1.2	The address of the workplace.
1.3	The date the manifest was last amended or, if it has not been amended, the date it was prepared.
1.4	<u>Business</u> and <u>after hours</u> telephone numbers for <u>at least two</u> persons who may be contacted if there is a notifiable incident at the workplace.
(2) Manifest – Storage in tanks and containers – WHS Regulation, Schedule 12, s. 2	
The manifest must include the following:	
For each hazardous chemical stored in a container:	
WHS Regulation, Schedule 12, s.2(2)	
2.1	The proper shipping name as stated in Table 3.2.3 of the ADG Code for the chemical.
2.2	The UN number as stated in Table 3.2.3 of the ADG Code for the hazardous chemical.
2.3	The class and division of the hazardous chemical as stated in Table 3.2.3 of the ADG Code (<i>packing group also recommended</i>).
2.4	For a flammable liquid category 4 (e.g. diesel), the product identifier, and the words 'combustible liquid'.
2.5	The container capacity in litres.
2.6	For fixed vertical tanks storing fire risk hazardous chemicals – the tank diameter.

(3) Manifest – Storage area for packaged hazardous chemicals ³ – WHS Regulation, Schedule 12, s.4	
The manifest must include the following:	
3.1	Identification number or code for the storage areas (<i>e.g. PS1, Area 1, Flammables store etc.</i>).
3.2	<u>Largest</u> quantity of each class of hazardous chemicals <u>likely</u> to be kept in the storage area.
3.3	The proper shipping name as stated in Table 3.2.3 of the ADG Code for the chemical.
3.4	The UN number as stated in Table 3.2.3 of the ADG Code for the hazardous chemical.
3.5	The class and division of the hazardous chemical as stated in Table 3.2.3 of the ADG Code (<i>packing group also recommended</i>).
3.6	For a flammable liquid category 4 (e.g. diesel), the product identifier, and the words 'combustible liquid'.

³ Schedule 12, Section 4 applies to:

- a storage area that contains, or is **likely** to contain, a packaged hazardous chemical, or a hazardous chemical in an IBC
- is required under the WHS Regulation to have a **placard**
- the hazardous chemicals are dangerous goods under the ADG Code.

Packaged hazardous chemicals means Schedule 11 hazardous chemicals in a container with – (a) a capacity not exceeding 500 litres; or (b) a net mass not exceeding 500kilogram.

(4) Manifest–plan of the workplace – WHS Regulation, Schedule 12, s.7

The manifest site plan of the workplace must include the following:

4.1	Be drawn to scale.
4.2	Show the location of tanks and other hazardous chemicals in containers (<i>i.e. stored in tanks, vessels</i>).
4.3	Show the location of storage areas for packaged hazardous chemicals and IBCs.
4.4	Provide the identification number or code for tanks/package storage areas, and a legend for symbols used in the site plan.
4.5	Show the location of the main entrance and other places of entry to and exit to the workplace.
4.6	Show the location of essential site services, including fire services and isolation points for fuel and power (<i>i.e. location of hydrants, hose reels, fuel e/stops and the main electrical switchboard</i>).
4.7	Show the location of main drains on the site (<i>to assist emergency services it is recommended the plan include the direction of flow underground and the location of discharge point/s</i>).
4.8	Show the location of the manifest kept on the boundary of the premises.
4.9	Include the direction of true north.
4.10	Describe the nature of the occupancy of adjoining sites or premises (<i>e.g. commercial premises, residential, aged care facility, vacant land</i>).

Hazardous chemical manifest - **Coolaroo** service station

Person conducting the business or undertaking (PCBU)	<i>Good Fortune Pty Ltd T/A Coolaroo Service Station</i>
Address of premises:	<i>125 Pelican Way, Coolaroo, QLD 4902</i>
Date last amended:	<i>29/02/2018</i>

Emergency contacts

Name	Position	Telephone
<i>B Wright</i>	<i>Managing Director</i>	Office hours: <i>07 3287 XXXX</i> After hours: <i>0488 248 XXX</i>
<i>A Citizen</i>	<i>Site Manager</i>	Office hours: <i>07 3287 XXXX</i> After hours: <i>0429 436 XXX</i>

Hazardous chemicals stored in tanks

Tank Id No.	Hazardous chemical					Tank	
	Proper shipping name	Common name	UN No.	Class	PG	Type	Capacity
<i>Tank 1</i>	<i>Petrol</i>	<i>PULP</i>	<i>1203</i>	<i>3</i>	<i>II</i>	<i>u/g</i>	<i>30 000 L</i>
<i>Tank 2</i>	<i>Petrol</i>	<i>ULP</i>	<i>1203</i>	<i>3</i>	<i>II</i>	<i>u/g</i>	<i>60 000 L</i>
<i>Tank 3</i>	<i>Petrol</i>	<i>ULP</i>	<i>1203</i>	<i>3</i>	<i>II</i>	<i>u/g</i>	<i>30 000 L</i>
<i>Tank 4</i>	<i>Petrol</i>	<i>E10</i>	<i>1203</i>	<i>3</i>	<i>II</i>	<i>u/g</i>	<i>30 000 L</i>
<i>Tank 5</i>	<i>Combustible liquid</i>	<i>Diesel</i>	<i>n/a</i>	<i>Combustible liquid</i>	<i>n/a</i>	<i>u/g</i>	<i>30 000 L</i>
<i>Tank 6</i>	<i>De-commissioned tank</i>	<i>-</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>u/g</i>	<i>60 000 L</i>
<i>Tank 7</i>	<i>Combustible liquid</i>	<i>Diesel</i>	<i>n/a</i>	<i>Combustible liquid</i>	<i>n/a</i>	<i>a/g</i>	<i>25 000 L</i>
<i>Tank 8</i>	<i>Abandoned tank</i>	<i>-</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>a/g</i>	<i>25 000 L</i>
<i>Tank 9</i>	<i>Petroleum Gases, Liquefied</i>	<i>LPG</i>	<i>1075</i>	<i>2.1</i>	<i>n/a</i>	<i>a/g</i>	<i>7 500 L</i>

u/g — underground a/g — aboveground n/a — not applicable vt — vertical tank (Tank diameter metres)

Package storage areas

Area	Hazardous chemical					Maximum quantity	
	Proper shipping Name	Common name	UN No.	Class	PG	Kg	L
<i>PS 1</i>	<i>Petroleum Gases, Liquefied</i>	<i>LPG</i>	<i>1075</i>	<i>2.1</i>	<i>n/a</i>	<i>25 x 9 Kg</i>	<i>530</i>
<i>PS 2</i>	<i>Petroleum Gases, Liquefied</i>	<i>LPG</i>	<i>1075</i>	<i>2.1</i>	<i>n/a</i>	<i>20 x 4.5 Kg</i>	<i>210</i>
<i>PS 3</i>	<i>Petroleum Gases Liquefied</i>	<i>LPG</i>	<i>1075</i>	<i>2.1</i>	<i>n/a</i>	<i>4 x 45 Kg</i>	<i>425</i>
<i>PS 4</i>	<i>Carbon Dioxide</i>	<i>CO2</i>	<i>1013</i>	<i>2.2</i>	<i>n/a</i>	<i>2 x 100 Kg</i>	<i>180</i>
<i>PS 5</i>	<i>Petroleum Gases, Liquefied</i>	<i>LPG</i>	<i>1075</i>	<i>2.1</i>	<i>n/a</i>	<i>2 x 210 Kg</i>	<i>990</i>

Note: Any items in the above tables that are not applicable to your workplace can be deleted from the template to suit your site.

