

# Manifest requirements for hazardous chemicals

under the *Work Health and Safety Act 2011*



## PN 11477

© *The State of Queensland (Department of Justice and Attorney-General) 2013*

Copyright protects this document. The State of Queensland has no objection to this material being reproduced, but asserts its right to be recognised as author of the original material and the right to have the material unaltered.

The material presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations, or warranties about the accuracy or completeness of the information contained in this publication, and the reader should not rely on it. The Queensland Government disclaims all responsibility and all liability (including, without limitation, liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason.

# 1. Introduction

The Queensland *Work Health and Safety Act 2011* (WHS Act) regulates the storage and handling of hazardous chemicals. Under the WHS Act, a person conducting a business or undertaking (PCBU) which uses, handles, stores or generates hazardous chemicals must now comply with specific sections in chapter 3 and chapter 7.1 of the Work Health and Safety Regulation 2011 (WHS Regulation).

When a PCBU has hazardous chemicals that exceed the manifest quantity in Column 5 of schedule 11, a manifest must be provided under section 347 of the WHS Regulation. Under section 348, the PCBU must also notify Workplace Health and Safety Queensland (WHSQ) of their workplace details and supply a copy of the manifest with the notification. The information required in a manifest is prescribed in schedule 12 of the WHS Regulation.

This guide can be used to assist a PCBU meet their duty to provide a manifest for hazardous chemicals under the WHS Regulation. This guide outlines the information to be included, provides an example manifest with site plan and provides a checklist to help ensure the required information is included.

## 2. Role of manifests

When emergency services respond to fires and chemical spills at workplaces that store hazardous chemicals, the responders need to know the potential hazards involved at such incidents. For effective and efficient emergency action, they need information about the type, quantity and locations of the hazardous chemicals stored at the workplace.

The role of the emergency services manifest is primarily to inform emergency personnel of the types, quantities, and locations of hazardous chemicals at the workplace. The site plan included with the manifest plays an important role in providing this information. The manifest adds to the information sources available to emergency services.

### Manifest versus registers

Manifests should not be confused with the hazardous chemical register (required under section 346 of the WHS Regulation). A register is a list of the hazardous chemicals used, handled or stored at the workplace including the safety data sheet (SDS) for each. The register is to be made readily accessible to workers or other persons in a work area who may be affected by the hazardous chemicals at the workplace. The purpose of the register is to provide workers and others access to information for about a hazardous chemical used in a work activity including hazards, first aid actions, storage conditions and appropriate personal protective equipment for the safe management of the product.

## 3. Information to be included in the manifest

Manifests should reflect current information and be prepared from up-to-date stock inventories. The manifest must contain information in accordance with schedule 12 of the WHS Regulation and is summarised below. A sample manifest is provided in Appendix 1. A checklist for the manifest content is provided in Appendix 2.

### 3.1 General information

The manifest must state:

- the name of the PCBU
- the address of the workplace
- the date when the manifest was first prepared or last amended
- business hours and after hours contact telephone numbers for at least 2 persons who may be contacted in the event of an incident.

In addition, it must give the following information about the hazardous chemicals stored at the premises.

### 3.2 Hazardous chemicals stored in bulk (e.g. stockpiles)

The manifest must include:

- identification number/code of the location where the bulk material is stored
- proper shipping name of the hazardous chemical
- maximum quantity likely to be stored in the storage area.

### 3.3 Hazardous chemicals stored in tanks (other than in IBCs)

For each hazardous chemical stored in tanks (other than in IBCs), the manifest must include the following information:

- identification number or code for each tank
- maximum storage capacity for each tank
- type (underground or above ground) tank
- the diameter of the tank (for fixed vertical tanks used to store fire risk hazardous chemicals).

For all hazardous chemicals, as stated in Table 3.2.3 in the ADG Code<sup>1</sup>, include:

- proper shipping name
- UN number
- dangerous goods class, division and packing group.

For Flammable Liquid Category 4, also known as Combustible liquid C1 - flashpoint 61-93°C (e.g. diesel)

- product name
- the words 'Combustible Liquid'.

### 3.4 Hazardous chemical storage areas for packages or IBCs

For hazardous chemicals stored in packages and IBC's that are required to have information placards (i.e. exceeds the prescribed placard quantity), the manifest must include the storage area identification number or code.

For all hazardous chemicals, include:

- dangerous goods class of the materials
- largest quantity of each class of hazardous chemical likely to be stored in the storage area.

For Flammable Liquid Category 4, also known as combustible liquid C1 - flashpoint 61-93 C (e.g. diesel)

- the words 'Combustible Liquid'
- the largest quantity likely to be stored in the storage area.

For hazardous chemicals that are classified as Class 2.3 toxic gas or packing group I under the ADG Code, include:

- proper shipping name as stated in Table 2.3.2 of the ADG Code
- dangerous goods class and division
- largest quantity of the materials likely to be stored in the storage area.

For hazardous chemicals that are classified as Unstable Explosives, Organic Peroxides Type A or Self Reactive Substances Type A, include:

- name of the hazardous chemical as listed in Appendix A of the ADG Code
- largest quantity of the materials likely to be stored in the storage area, and
- the words 'Goods too dangerous to be transported'.

### 3.5 Hazardous chemicals being manufactured

For each area that hazardous chemicals are manufactured, include:

- the manufacturing area identification number or code
- a description of the hazardous chemicals being manufactured in the area
- the average and the largest quantity of each class of hazardous chemical likely to be

---

<sup>1</sup> ADG Code is the Australian Dangerous Goods Code available at [www.ntc.gov.au](http://www.ntc.gov.au). The ADG Code or product safety data sheet can provide the product's dangerous goods classification details including the class, division and packing group and identification details including the proper shipping name and UN number.

manufactured.

### **3.6 Hazardous chemicals in transit**

For each area that hazardous chemicals are stored in transit, include:

- transit area identification number or code
- dangerous goods class of the hazardous chemicals that are stored, and
- quantity of each dangerous goods class of hazardous chemical stored or likely to be stored.

Transport documents that comply with the ADG Code requirements for the goods in transit may be attached to the manifest to comply with the requirements for packaged hazardous chemicals.

### **3.7 Site plans**

The purpose of the 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 included details of all significant facility and surrounding area features. It should be easy for emergency services personnel to read. The plan of the premises should be on a scale that adequately illustrates the details required by the WHS Regulation.

The following information is required on a site plan:

- the location where any 'goods too dangerous to be transported', class 2.3 'toxic gas' and packing group I dangerous goods of any class that are stored, used or manufactured
- locations and identification number or code of all bulk storages
- locations and identification number or code of all tanks
- locations where hazardous chemicals in packages or IBC's are stored
- areas where hazardous chemicals are manufactured
- areas where dangerous goods in transit may be located.

Provide a legend for the identification numbers and codes for the above areas and indicate true north.

The site plan should also include the location of:

- the main entrance and other entry and exit points to the workplace
- essential site services including fire services and isolation points for fuel and power
- all drains on the site
- location of the manifest for the premises
- land usage or nature of the occupancy on adjoining sites or premises.

In addition, the following information may be relevant inclusions:

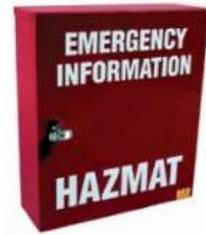
- the location of all buildings, amenities, structures and internal roadways on the premises and their uses including environmentally sensitive areas and watercourses
- areas of public access adjacent to the site and parking (if any)
- public street names adjacent to the premises and evacuation routes
- nature of fences (if any)
- distance scale
- site topography
- the location of emergency resources and equipment.

## **4. Location of manifest and site plans**

The manifest and site plan must be kept in a place that is in agreement with the Queensland Fire and Rescue Service (QFRS). QFRS recommend that the manifest and site plan be kept in a red waterproof container kept as close as possible to the main entrance.

#### 4.1 HAZMAT box

It is recommended that the manifest and site plan be kept in a red weatherproof container, commonly known as a 'Hazmat box'. An example of a Hazmat box is illustrated on the right. Alternative designs such as tubular versions with caps for weather proofing are also acceptable.



The box should be located:

- inside the boundary near the outer warning placard and as close as practicable to the main entry to the workplace
- on the left hand side as you enter the workplace so a fire officer can safely and readily access the manifest.

If you wish to vary the location, consult with the local QFRS fire station (the responders) about the best position for its location (e.g. gatehouse). If more than one entry point is used regularly (e.g. two- street access) it may be necessary to have a Hazmat box at each entry.

A suitable sized Hazmat box is 400 mm x 300 mm x 90 mm deep. The box should be signal red in colour preferably with 100 mm white letters stating 'HAZMAT'. It should be mounted securely, for example, on a steel post and concreted in position. For security, a 003 series lock should be installed on the box to enable the emergency services to open the lock as desired. While it is not mandatory to include the word HAZMAT, it is recommended as a useful label.

Further information is available from the [QFRS](#).

#### 4.2 Manifest box contents

The contents of the manifest box should be limited to the site manifest document and site plan. The site information and site contacts should be listed first, followed by location and quantity information of the hazardous chemicals stored. The site plan/s must clearly identify the hazardous chemical storage areas and other relevant information (preferably printed in A3 format).

**Tip:** Laminated versions are useful to protect against moisture during storage and wet conditions when required during an incident. Larger formats like A3 should use grid lines and grid references for large more complex facilities for readily pin-pointing areas.

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 knowledgeable about the site.

#### Safety data sheets (SDS)

Many manifest quantity workplaces store and handle a wide variety of hazardous chemicals. Trying to accommodate all SDS in a manifest box will quickly overload it. Generally, documents such as SDS, environment management plans or emergency plans should be avoided in the manifest box. These sorts of documents may be useful to the emergency services, but should be kept elsewhere at a location known to the sites emergency contact personnel. Only if there are a few (e.g. 1-5) hazardous chemicals stored and handled at the workplace, then it may be appropriate to include the SDS for these.

### 5. Notification

All workplaces that exceed the manifest quantity listed in column 5 of Schedule 11 of the WHS Regulation are required to notify Workplace Health and Safety Queensland of their existence under section 348. Notification requirements for hazardous chemicals including relevant forms are available at [www.worksafe.qld.gov.au](http://www.worksafe.qld.gov.au).

The manifest and site plan that is compliant with schedule 12 is required to be submitted with the notification for a manifest quantity workplace (Refer to Form 73: Notification of a manifest quantity workplace (MQW)). This guide will assist the PCBU to ensure the manifest is compliant with schedule 12.

## **6. Further information and assistance**

### **Consultants and industry associations**

WHSQ maintain a list of consultants specialising in dangerous goods, under 'dangerous goods trainers and consultants' at [www.worksafe.qld.gov.au](http://www.worksafe.qld.gov.au) .

The Australasian Institute of Dangerous Goods Consultants (AIDGC) can assist with consulting services and provides a consultant contact list at [www.aidgc.org.au](http://www.aidgc.org.au).

Manufacturers, suppliers and local distributors of hazardous chemical products may be able to provide technical assistance regarding their products, including the provision of safety data sheets.

### **Workplace Health and Safety Queensland**

For further information on the *Work Health and Safety Act 2011* and Work Health and Safety Regulation 2011, visit [www.worksafe.qld.gov.au](http://www.worksafe.qld.gov.au) or call the Workplace Health and Safety Infoline on 1300 369 915.

Any enquiries relating to this guide may be directed to 3874 7579 or [hicb@justice.qld.gov.au](mailto:hicb@justice.qld.gov.au) .

## Appendix 1 — Example manifest for hazardous chemicals

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.

<b>Person Conducting the Business or Undertaking (PCBU)</b>	<i>XYZ CHEMICALS PTY LTD</i>
<b>Address of premises:</b>	<i>123 Cambridge Street, Eagle Farm, QLD 4009.</i>
<b>Date of preparation:</b>	<i>21 April 2012</i>

### Emergency Contacts

<b>Name</b>	<b>Position</b>	<b>Telephone</b>
<i>B Wright</i>	<i>Production supervisor</i>	<i>B/H : 0453 345 378 A/H : 07 3425 6345</i>
<i>A Citizen</i>	<i>Safety manager</i>	<i>B/H : 0452 454 733 A/H : 07 3029 4563</i>

### Hazardous chemicals stored in bulk

<b>Storage area</b>	<b>Dangerous goods</b>			<b>Largest quantity</b>
	<b>Class</b>	<b>Sub risk/s</b>	<b>PG</b>	
<i>n/a</i>				<i>Nil</i>

### Hazardous chemicals stored in tanks (other than IBC's)

<b>Tank id No.</b>	<b>Dangerous goods</b>					<b>Tank</b>		
	<b>Name</b>	<b>UN no.</b>	<b>Class</b>	<b>Sub risk</b>	<b>PG</b>	<b>Type</b>	<b>Capacity</b>	<b>Diameter</b>
<i>DG T1</i>	<i>Methanol</i>	<i>1230</i>	<i>3</i>	<i>6.1</i>	<i>II</i>	<i>u/g</i>	<i>30 000 L</i>	<i>n/a</i>
<i>DG T2</i>	<i>Abandoned tank</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>u/g</i>	<i>30 000 L</i>	<i>n/a</i>
<i>DG T3</i>	<i>LP Gas</i>	<i>1075</i>	<i>2.1</i>	<i>n/a</i>	<i>n/a</i>	<i>a/g</i>	<i>5 000 L</i>	<i>n/a</i>
<i>DG T4</i>	<i>Diesel</i>	<i>n/a</i>	<i>Combustible Liquid</i>	<i>n/a</i>	<i>n/a</i>	<i>a/g</i>	<i>10 000 L</i>	<i>See note</i>

u/g — underground a/g — aboveground n/a — not applicable

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

## Package storage areas

The following types of hazardous chemicals must be identified individually:

1. Class 2.3 - toxic gas
2. Packing group I chemicals of any dangerous goods class
3. Chemicals that are classified as goods too dangerous to be transported

### Package store 1

Area	Hazardous chemicals				Largest quantity
	Name	Class	Sub risk/s	PG	
PS1	<i>Chlorine</i>	2.3	5.1 & 8	n/a	70 L

### Package store 2

Area	Hazardous chemicals			Largest quantity
	Class	Sub risk/s	PG	
PS2	6.1	n/a	II	2 500 L
PS2	6.1	n/a	III	12 000 L

### Package store 3

Area	Hazardous chemicals				Largest quantity
	Name	Class	Sub risk/s	PG	
PS3	<i>Carbon disulphide</i>	3	6.1	I	200 L

Area	Hazardous chemicals			Largest quantity
	Class	Sub risk/s	PG	
PS3	3	n/a	II	4 000 L
PS3	3	n/a	III	8 000 L
PS3	<i>Combustible Liquid</i>	n/a	n/a	2 000 L

### Package store 4

Area	Hazardous chemicals			Largest quantity
	Class	Sub Risk/s	PG	
PS4	8	n/a	II	4 000 L
PS4	8	n/a	III	8 000 L

### Manufacturing areas

Area	Hazardous chemicals			Average quantity	Largest quantity
	Class	PG	Sub risk/s		
MA1	3	II	6.1	2 500 L	4,000 L
MA2	8	II	n/a	1 400 L	2 800 L
	6.1	III	n/a	600 L	1 200 L

### Transit area

Area	Class	PG	Sub risk/s	Largest quantity
n/a				Nil

Add in document control and authority information (e.g. signed off by...)

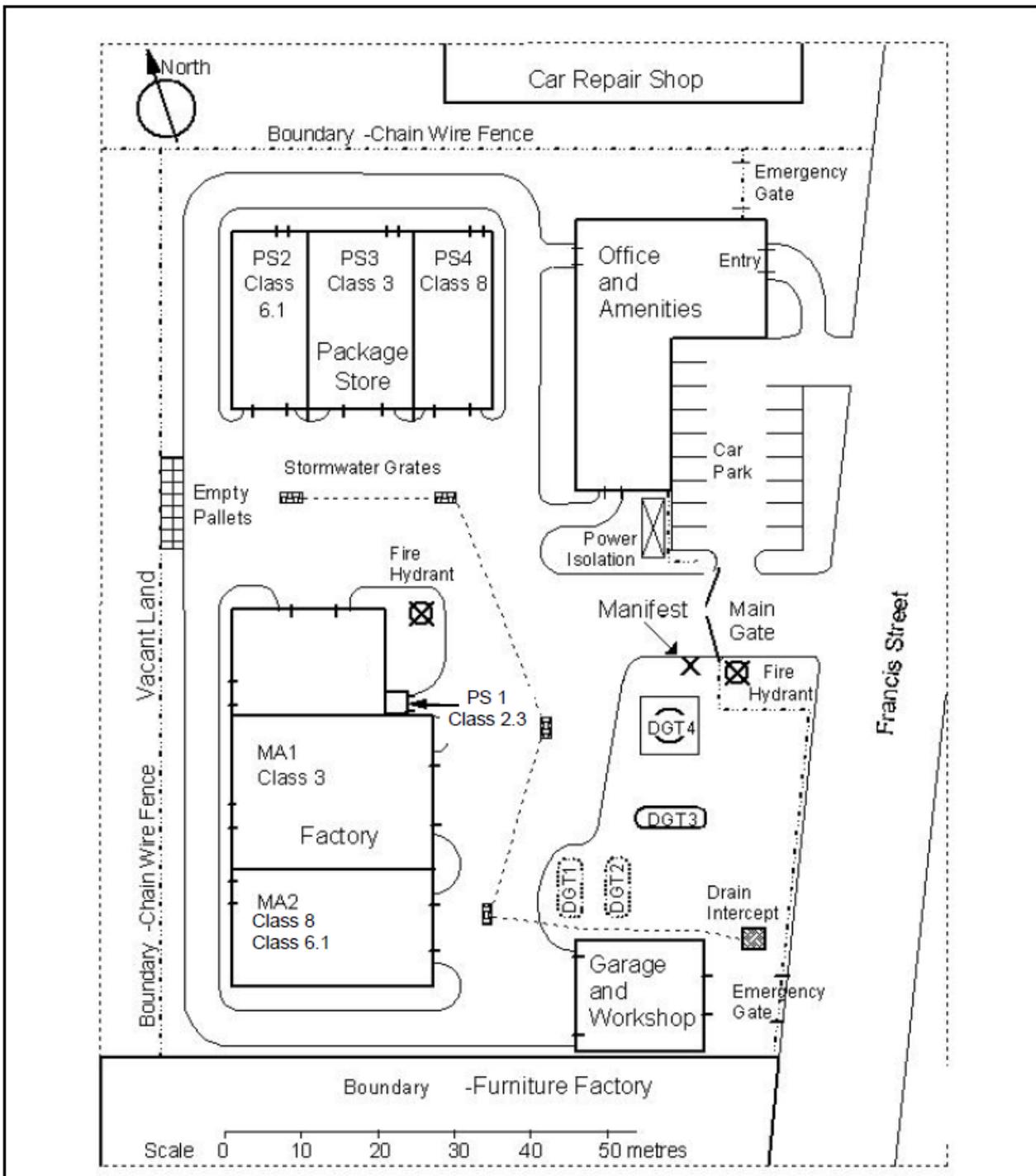
# Example Manifest Site Plan

## XYZ CHEMICALS PTY LTD SITE PLAN

NAME OF PREMISES: XYZ Chemicals Pty Ltd  
 ADDRESS: 123 Cambridge Street, Eagle Farm.  
 DATE OF THIS PLAN DRAWING: 2<sup>nd</sup> February 2012.  
 DATE OF LAST REVISION: 21<sup>st</sup> April 2012.

### Legend

Insert descriptions for the various codes, symbols used in plan for clarity



## Appendix 2 — Manifest checklist

- This is a self-assessment checklist is designed to help ensure that the manifest required under regulation 347 complies with the requirements of schedule 12, Work Health and Safety Regulation 2011.
- Where applicable to the workplace, the following information must be clearly shown in the manifest.
- Tank and storage area identification numbers or codes recorded in the manifest must be clearly identifiable in site plan.

### Information to be included in the manifest

#### General information

- Name of the person conducting a business or undertaking (PCBU)
- Address of the workplace
- Date when the manifest prepared / amended
- Business hour contact telephone numbers for at least two persons
- Business and after hours contact telephone numbers for at least two persons specific to the workplace

#### Hazardous chemicals stored in bulk storage (not in containers e.g. stockpiles)

- Storage area identification number or code
- Name of chemical stored in a bulk storage area (e.g. ADG Code description)
- Quantity of chemical stored in a bulk storage area

#### Hazardous chemicals stored in bulk containers (e.g. tanks other than in IBCs)

##### For each bulk container, include:

- Identification number or code
- Container type (u/g or underground, a/g or aboveground, vertical or horizontal)
- Container capacity in litres
- For vertical tanks storing fire risk hazardous chemicals, include the tank diameter

##### For identification of the hazardous chemical contents of each, include:

- Proper shipping name, UN number, class, division (packing group (PG) also recommended)
- For combustible liquids having a flash point  $\leq 93^{\circ}\text{C}$  (e.g. diesel)   
- the product name and words 'Combustible Liquid'
- For goods too dangerous to be transported   
- the name as appears in Appendix A of the ADG Code and words 'Goods too dangerous to be transported'

#### Storage areas for hazardous chemicals in packages or IBCs

##### For each placarded storage area

- Identification number or code
- Largest quantity of each class likely to be stored in the storage area

**Applies when the storage area is required to have a placard**

### For identification of the hazardous chemicals

- Dangerous goods class, division (packing group also recommended)
- For combustible liquids (flash point  $\leq 93^{\circ}\text{C}$ )
  - the words 'Combustible Liquid' and largest quantity
- For class 2.3, packing group I of any class
  - Proper shipping name, class/division and largest quantity
- For goods too dangerous to be transported
  - the name as appears in Appendix A of the ADG Code and words 'Goods too dangerous to be transported', and largest quantity

### For each area in which hazardous chemicals are manufactured

- Identification number or code
- Average and the largest quantity in manufacture
- Description of hazardous chemicals being manufactured for example the chemical name or other recognised descriptor such as dangerous class, division and packing group, or combustible liquid or GTDTBT/Appendix A name.

### Hazardous chemicals in transit

- Identification number or code
- The requirements for hazardous chemicals in packages or IBCs described above apply. However, it is acceptable if the dangerous goods transport documents are provided in the manifest box at the workplace for dangerous goods under the ADG Code that are in transit.

### Site plans

A scale plan of the workplace must show -

- Location and ID No./code/description of bulk storage areas not in containers (e.g. stockpiles)
  - Location and ID No./code/description of bulk containers (e.g. tanks and vessels)
  - Location and ID No./code/description of package and IBC storage areas
  - Location and ID No./code/description of manufacturing areas
  - Location and ID No./code/description of in transit areas
  - Legend for identification numbers or codes used in the plan
  - The main entrance and other entry and exit points to the workplace
  - Essential site services including fire services or gas supply
  - Location of isolation points for fuel and power
  - Location of all drains
  - Location of the manifest
  - Description of the nature of the occupancy of adjoining sites or premises
  - Identification of true north
-

For some workplaces, additional information may assist emergency services such as:

- location of buildings, amenities, structures and internal roadways for large sites
- surrounding or adjacent environmentally sensitive areas and watercourses
- areas of public access adjacent to the site and parking
- public street names adjacent to the premises and evacuation routes
- nature of fences and restrictions to site accessibility (if any)
- site topography
- location of emergency resources and equipment.

NOTE: ADG Code information is available from the products safety data sheet (SDS) under the transportation section. The ADG Code is available at [www.ntc.gov.au](http://www.ntc.gov.au) under safety and compliance.

