





| First Issued | 14 November |
|--------------|---------------|
| | 2012 |
| Reviewed | 18 December |
| | 2019 |
| Version | 2 |
| Author | SSEO Mitchell |
| | |

SOUTH AUSTRALIAN FIRE SERVICES

EMERGENCY PLANNING GUIDELINE 001

Emergency Plans at Facilities having Notifiable Quantities of Hazardous Chemicals and Major Hazard Facilities

TABLE OF CONTENTS

| 1 S | COPE | 3 |
|------|---|----|
| 2 W | HY IS NOTIFICATION IMPORTANT? | 3 |
| 2.1 | Emergency Response | 3 |
| 2.2 | Legal Requirements | 3 |
| 2.3 | What are notifiable chemicals? | 4 |
| 3 DI | EFINITIONS | 4 |
| 4 S | COPE OF EMERGENCY PLAN | 6 |
| 4.1 | Basic Hazardous chemicals Site | 7 |
| 4.2 | Mixed Class Hazardous chemicals Site | 7 |
| 4.3 | MHF's and Potential MHF's | 7 |
| 5 C | ONTENT OF AN EMERGENCY PLAN | 7 |
| 5.1 | Emergency Services Information Package (ESIP) | 7 |
| 5.2 | Emergency Plan | 12 |

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

| | 5.2.1 | Title Page and Authority | 12 | | | |
|----|--------------|--|----|--|--|--|
| | 5.2.2 | Structured Document Information | 12 | | | |
| | 5.2.3 | Introductory Matter | 12 | | | |
| | 5.2.4 | Aims and Objectives of the Plan | 12 | | | |
| | 5.2.5 | Emergencies and Responses | | | | |
| | 5.2.6 | Compatibility with Incident Management Plans | 15 | | | |
| | 5.2.7 | Administrative Matters | | | | |
| | 5.2.8 | Implementation and Testing | | | | |
| | 5.2.9 | Appendices | | | | |
| | 5.2.10 | Contact List | | | | |
| | 5.2.11 | Location Map and Site Layout Plan | 16 | | | |
| 6 | LOCA | ATION OF EMERGENCY PLAN | 20 | | | |
| 7 | 7 REFERENCES | | | | | |
| 8 | FURT | HER ASSISTANCE | 20 | | | |
| Δ1 | INFX A | A EMERGENCY PLAN TEMPLATE | 22 | | | |

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

1 SCOPE

This document details South Australian Metropolitan Fire Service (MFS) and South Australian Country Fire Service (CFS) minimum requirements for an emergency plan required to be developed for sites with 'manifest' quantities of hazardous chemicals, and Major Hazard Facilities (MHF) or Potential MHFs.

This document may be used as a guide by occupiers of hazardous chemicals sites, explosive sites and operators of MHFs or potential MHFs to assist in developing an emergency plan for their site. The emergency plan is a critical component in implementing appropriate emergency management strategies.

The emergency plan incorporates pre incident information regarding the facility and required actions to be undertaken in response to various emergency events. An emergency plan is a critical component of the overall site emergency management system that provides procedural and operational guidelines to the emergency controller, site manager, fire wardens and first aid officers. All personnel involved in the implementation of the emergency plan need to be trained and involved in regular exercises to test assumptions made in the emergency plan.

The emergency plan also contains information that assists emergency services personnel in formulating appropriate incident management strategies and tactics.

2 WHY IS NOTIFICATION IMPORTANT?

2.1 Emergency Response

The SA Fire Services use the information you provide 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 fire/emergency.

It is also used by the Fire Services to better develop their statewide response. By giving the most up to date and accurate information, the Fire Services will be able to protect your site as best they can.

2.2 Legal Requirements

The Work Health and Safety Regulation 2012 (WHS Reg.) places the onus upon employers, controllers of premises, occupiers/operators of hazardous chemicals sites or MHF's to carry out a comprehensive risk assessment to identify, eliminate or control hazards and risks at the site. This risk assessment must be used as the basis for developing the emergency plan.

Further, the WHS Reg. also requires employers, controllers of premises, occupiers/operators of hazardous chemicals sites and MHF's to provide such information, instruction and training to employees and other persons as may be necessary to ensure their health and safety.

An emergency plan must be developed and provided:

a) In accordance with Regulation 43 of the WHS Reg – a person conducting business or undertaking at a workplace must ensure that an emergency plan is prepared for the workplace, including for workers who may work at multiple workplaces.

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

- b) In accordance with Regulation 361 of the WHS Reg. when 'manifest' quantities of hazardous chemicals are used, handled or stored; and
- c) In accordance with Regulation 557 of the WHS Reg. for MHF's.

2.3 What are notifiable chemicals?

All hazardous chemicals listed in Schedule 11 of the WHS Regulations are notifiable to SA Fire Services if manifest quantities are exceeded.

3 DEFINITIONS

The following definitions apply in this document:

- a) **Assembly area** a safe pre-designed open space where persons must assemble after evacuation.
- b) **Basic hazardous chemicals site** a site that stores, uses or handles manifest quantities of a single class of hazardous chemicals where any relevant risk assessment indicates there should be no off site impacts/effects; OR Petrol stations with 'manifest' quantities of Class 2.1 and 3 hazardous chemicals only.
- c) **Bulk Storage** Any quantity of hazardous chemical that is:
 - i. In a container with a capacity exceeding 500L or net mass of more than 500kg, or
 - ii. If the hazardous chemical is a solid, an undivided quantity exceeding 500kg
- d) **Emergency Incident** an emergency incident can be described as an abnormal and dangerous or potentially dangerous situation that harms or threatens to harm persons, property or the environment which requires urgent action to control, correct and return to a safe condition.
- e) **Emergency plan** a written plan that details the operational procedures required to be undertaken to deal with an emergency.
- f) Emergency Services Information Package (ESIP) a removable and laminated inclusion at the front of the Emergency Plan that contains concise relevant information to allow emergency services to commence initial combat operations.
- g) Fire Risk Hazardous Chemical is a hazardous chemical that can be any of the following:
 - i. A flammable gas
 - ii. A flammable liquid (hazard category 1 to 3)
 - iii. A flammable solid
 - iv. A substance liable to spontaneous combustion
 - v. A substance, which in contact with water, emits flammable gases
 - vi. An oxidising substance
 - vii. An organic peroxide

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

viii. Burns readily or supports combustion

- h) **Fire Safety Equipment (FSE)** equipment installed on site or within a building which provides fire safety through detection, monitoring and suppression systems (e.g. alarms, sprinklers, hydrants, hose reels, FIP, EWIS).
- i) In Transit A load of hazardous chemicals for transport that:
 - i. Is supplied to, or stored at, a workplace in containers that are not opened at the workplace
 - ii. Is not used at the workplace
 - iii. Is kept at the workplace for more than five consecutive days
- j) Major Hazard Facility (MHF) means:
 - i. Facility at which Schedule 15 materials are present or likely to be present in a quantity that exceeds their threshold quantity; or
 - ii. A facility where the aggregate quantity ratio of Schedule 15 materials which are present or likely to be present exceeds 1.0; or
 - iii. A facility at which Schedule 15 materials are present or are likely to be present, not being a facility to which paragraph (i) or (ii) applies, that is, for the time being, determined by Safework SA to be a Major Hazard Facility under Chapter 9 of the WHS Reg.

Note: Schedule 15 is a reference to Schedule 15 of the WHS Reg.

- k) 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.
- Manifest Quantities in relation to hazardous chemicals, the threshold quantities as detailed in the Table to Schedule 11 of the WHS Reg.
- m) **Mixed class hazardous chemicals site** a site that stores, uses or handles multiple classes of hazardous chemicals above placard quantity and/or consists of multiple hazardous chemicals stores/depots where the total quantity of hazardous chemicals exceeds manifest quantity. (See Regulation 347 and Table 11.1 of Schedule 11 of the WHS Req.) AND

A site that does not qualify as a basic hazardous chemicals site.

- n) Packaged hazardous chemicals Is a Schedule 11 hazardous chemical in a container with:
 - i. A capacity not exceeding 500L, or
 - ii. A net mass not exceeding 500kg.

This means the complete product, consisting of goods and their packaging for transport.

o) **Placard quantities** – in relation to hazardous chemicals, the threshold quantities as detailed in the Table to Schedule 11 of the WHS Reg.

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

p) Potential Major Hazard Facility (MHF) - means:

- Facility where materials listed in Schedule 15 of the WHS Reg. are present or are likely to be present in a quantity that exceeds 10% of their threshold quantity but does not exceed their threshold quantity, or
- ii. A facility where the aggregate quantity ratio of materials listed in Schedule 15 of the WHS Reg. are present or are likely to be present at the facility exceeds 0.1 but does not exceed 1.0 (refer to Clause 4 of Schedule 15 of the WHS Reg. for explanation of the aggregate quantity ratio).
- q) Security sensitive dangerous substances includes security sensitive ammonium nitrate

r) Security sensitive ammonium nitrate - means

- i. Ammonium nitrate; or
- ii. Ammonium nitrate blasting intermediate; or
- iii. Ammonium nitrate at greater than 45% mass per mass mixed with any other substance, but not in solution,

However, does not include a substance or article that satisfies the requirements for assignment to Class 1 Dangerous Good.

4 SCOPE OF EMERGENCY PLAN

Any emergency plan should be developed using the premises/sites risk assessment as a basis for determining what is required at the site, the emergency plan must be site specific and 'fit for purpose' e.g. for a small site the plan need not be overly complex.

As the size of the site increases and/or quantities and nature of hazardous chemicals etc. increases, so to must the level of detailed inclusions in the emergency plan. All assumptions and response strategies developed in the emergency plan must be realistic and achievable.

The emergency plan must not only be written for employees and contractors working at the site, but also for attending emergency responders. Keep this in mind when developing the plan.

Emergency plans shall be provided at locations in accordance with Section 6 of this document.

Safework Australia instructs that the emergency plan must provide for the following:

- Emergency procedures, including an effective response to an emergency
- Evacuation procedures
- Notifying emergency service organisations at the earliest opportunity
- Medical treatment and assistance
- Effective communication between the person authorised to coordinate emergency response and all people at the workplace
- Testing of the emergency procedures including the frequency of testing

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

• Information, training and instruction to relevant workers in relation to implementing the emergency procedures

4.1 Basic Hazardous chemicals Site

As a minimum for a basic hazardous chemicals site, the emergency plan should consist of an ESIP (refer to section 5.1) with additional concise documentation that details personnel emergency training and their actions (emergency procedures) for any reasonably foreseeable emergency incident that may occur at the site (site specific emergency response training and frequency, etc). These actions should include first aid fire fighting/containment (if safe to do so), alarm activation, plant shutdowns and evacuation procedures. A distribution list should also be included.

Note: This does not restrict occupiers from developing a more detailed emergency plan using section 5 of this document as a guide.

4.2 Mixed Class Hazardous chemicals Site

For a mixed class hazardous chemicals site, the emergency plan should be developed following Sections 5 and Annex A of this document as a guide.

4.3 MHF's and Potential MHF's

Due to the potential for significant off site impact, operators of a MHF or Potential MHF should follow the <u>Guide for Major Hazard Facilities – Emergency Plans</u> (Safework Australia) for the preparation of emergency plans for their sites.

5 CONTENT OF AN EMERGENCY PLAN

5.1 Emergency Services Information Package (ESIP)

The ESIP is a removable inclusion at the front of the Emergency Plan that contains concise relevant information to allow emergency services to commence initial combat operations. The ESIP must have all pages laminated so that it is durable in harsh environments.

The ESIP should include:

- a A company letter head as a title page displaying business address, PO Box, Head Office address, two emergency contacts (names, corporate positions, business and after hours contact numbers), date prepared and the location of any manifests, emergency plans and Safety Data Sheets (SDS) held on site.
- b Two (2) <u>laminated</u> copies of a scaled site plan (A3 minimum size). The site plan must be clearly legible to firefighters even in dimly lit conditions. <u>A site plan must</u>:
 - 1. Be drawn to scale and show the direction of true north.
 - 2. Include a legend that explains what any ID numbers and codes stand for.
 - 3. Include a description of the activities carried out in adjoining sites or premises.
 - 4. Show the location of hazardous chemicals stored in bulk and provide their identification details (for example "DGT 3")
 - 5. Show the location of storage areas for packaged hazardous chemicals and IBCs and provide their identification details (for example "PS 3")
 - 6. Show the location where hazardous chemicals are manufactured or generated on site and provide their identification details (for example "MA 2)

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

- 7. Show the areas which have been designated for chemicals that are "in transit" (for example "ITA 1")
- 8. Describe in words the location of things referred to in items 4-7 above (for example, "the chemicals at DGT 3 are located in the southern corner of the premises and can be reached by entering the main gate and heading south past DGT 4")
- 9. Show the site boundaries
- 10. Show the location of the main entrance and other places of entry to and exit from the workplace (including emergency exits)
- 11. Show any internal roadways
- 12. Show the assembly and safe areas
- 13. Show all fire safety equipment (e.g. boosters, hydrants, sprinklers, fire hose reels, fire/emergency control centres, PPE for site personnel etc),
- 14. Show any essential site services, including fire services and isolation points for fuel, power, bunds, pipe work and stormwater (if applicable)
- 15. Show all drainage systems
- 16. Show where the manifest and emergency plan are located
- 17. Show and provide a description of adjoining workplaces, occupancies or sites (for example "car repair shop" and "furniture factory")
- 18. Show on the site map the location of all other buildings, amenities, fences, car parks and storage areas
- 19. Include the site name, address details, and the date the plan was prepared/revised
- 20. Include any surrounding or adjacent environmentally sensitive areas and watercourses
- 21. Include public street names adjacent to the premises and evacuation routes
- 22. Site topography

Note: Site plans for large sites should include a grid reference system similar to street directories.

Note: More than one diagram may be needed.

Note: An example Site Plan can be seen in Figure 3.

- c A copy of the sites hydrant system block plan (if applicable);
- d A current copy of the "Acknowledgement of Notification of hazardous chemicals on premises' received from Safework SA (where applicable) OR similar concise list detailing location, maximum quantity, class and name of materials.
- e <u>A manifest detailing all hazardous chemicals/hazardous materials on site</u> (example manifests are below)

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

HAZARDOUS CHEMICALS STORED IN BULK

This should include chemicals not stored in a container, for example a stockpile.

| | ı | Hazard | ous che | micals | | Storage Area | | | | |
|------|------------------|-----------|---------|-------------|------------------|-----------------|-----------------|----------|----------|--|
| Area | Shipping Name | UN No. | Class | Sub Risk | Packing Group | Type of Area | Design capacity | Diameter | Quantity | |
| SA1 | Sulphur | 1350 | 4.1 | | III | Open area | 60,000kg | 8m | 20,000kg | |
| | | | | | | | | | | |

HAZARDOUS CHEMICALS STORED IN TANKS

This does not include hazardous chemicals stored in intermediate bulk containers (IBCs).

| | F | lazard | ous che | micals | | Tanks | | | | |
|------|------------------|-----------|---------|-------------|------------------|-------|----------|----------|----------|--|
| Area | Shipping Name | UN No. | Class | Sub Risk | Packing Group | Туре | Capacity | Diameter | Quantity | |
| DGT1 | Methanol | 1230 | 3 | 6.1 | II | u/g | 30,000L | 3m | 20,000L | |
| | | | | | | | | | | |

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

PACKAGE STORES

This includes stores of IBCs.

Package store 1

| | | Hazard | ous cher | Storage Area | | | | |
|------|------------------|--------|----------|--------------|------------------|------------------|---------------------|---------------------|
| Area | Shipping Name | UN No. | Class | Sub Risk | Packing Group | Type of Area | Average Quantity | Largest Quantity |
| PS1 | Chlorine | 1017 | 2.3 | 5.1 8 | | Cylinders in use | 70L | 70L |
| | | | | | | | | |

Package store 2

| | Haz | ardous | Storage Area | | | | | |
|------|---|-----------|--------------|-------------|------------------|-----------------|---------------------|---------------------|
| Area | Shipping Name | UN No. | Class | Sub Risk | Packing Group | Type of Area | Average Quantity | Largest Quantity |
| PS2 | Organophosphorus pesticide, liquid, toxic | 3018 | 6.1 | | II | Roofed store | 2,000L | 2,500L |
| | | | | | | | | |

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

CHEMICALS IN TRANSIT

A chemical is considered 'in transit' if it:

- is supplied to, or stored at, a workplace in containers that are not opened at the workplace;
 and
- is not used at the workplace; and
- is kept at the workplace for not more than 5 consecutive days.

Providing all the associated transport documents are kept with the manifest, then a separate table like the one below is not required.

Transit Areas

| | На | zardou | Transit Area | | | | |
|------|------------------------|-----------|--------------|-------------|------------------|---------------------|---------------------|
| Area | Shipping Name | UN No. | Class | Sub Risk | Packing Group | Average Quantity | Largest Quantity |
| TA1 | Krypton, compressed | 1056 | 2.2 | • | | 500L | 1,000L |
| | | | | | | | |

MANUFACTURING AREAS

| | Hazaı | Manufacturing Area | | | | | |
|------|------------------------------------|--------------------|-------|-------------|------------------|---------------------|---------------------|
| Area | Shipping Name | UN No. | Class | Sub Risk | Packing Group | Average Quantity | Largest Quantity |
| MA1 | Isopropanol (Isopropyl alcohol) | 1219 | 3 | | II | 2,500L | 4,000L |
| | | | | | | | |

NOTE:

- Area should correspond to the locations in the site plan.
- Type of area might include "Roofed store", "Drum Store" etc.
- The diameter of the tank is required for a fixed vertical tank used to store fire risk hazardous chemicals
- Type of tank refers to underground (u/g) or above ground (a/g)
- f Details of any hazardous chemicals/hazardous materials manufactured/blended etc. on site for which the emergency services may not have access to a SDS (if applicable).
- g Highlight details of any Class 4.2 or 4.3 hazardous chemicals, or any other substances that are reactive to water, on site (if applicable).

Note: An ESIP as listed above can also satisfy the requirements of Regulation 347 and Schedule 12 of the WHS Reg. in relation to the provision of a manifest.

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

5.2 Emergency Plan

5.2.1 Title Page and Authority

The front cover of the emergency plan (title page) must clearly identify that the document is the emergency plan for the nominated building of the facility (refer to Figure 1).

The plan should also indicate that it has been prepared and authorised by a responsible person such as an owner or manager, and that the plan is current as defined by the release date.

5.2.2 Structured Document Information

The emergency plan must be a structured document having a hierarchy of headings outlined by a table of contents at the beginning of the plan. All pages should also be numbered with the contents matching the appropriate pages for referencing.

The plan should include a distribution list of all positions or organisations supplied with a copy of the plan. The distribution list is used when promulgating updates and revisions of the plan.

EMERGENCY PLAN FOR:

ABC PTY LTD 1 BROWN STREET JONESVILLE SA

Prepared by: ABC Pty Ltd Authorised by: John Smith – Manager Date: 1 September 2011

Figure 1: Sample Title Page of Emergency Plan

The emergency plan must be reviewed in accordance with regulatory requirements. The MFS and CFS recommend that the emergency plan contact list be reviewed annually, as a minimum.

A record of plan amendments should be included in the plan. The plan should indicate the position responsible for revising the plan and applicable revision schedule (refer to section 5.8).

A glossary and abbreviations section should be added to defining any special terminology, titles or acronyms used within the plan.

5.2.3 Introductory Matter

The emergency plan should include an introduction that briefly describes the site covered by the plan including an outline of main functional areas. This should include operating hours and the minimum and maximum number of staff on site at any one time.

A clear and simple definition of what constitutes an emergency incident on the site and various levels of possible emergencies should be provided (e.g. refer to definition of 'emergency incident').

Note: Recommended levels of emergency are i) local, ii) site, and iii) external.

5.2.4 Aims and Objectives of the Plan

The emergency plan should include a broad statement outlining the aim or purpose of the plan.

Statements that detail the results expected to be achieved from applying the plan, such as the following, should supplement the aim:

1. Control or limit any effect of an emergency, or potential emergency, on or off site;

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

- 2. Facilitate emergency response and provide assistance on the site as is appropriate for the situation:
- 3. Ensure that all vital information is communicated to relevant persons and external agencies as soon as possible;
- 4. Facilitate the reorganisation and recovery operations so that normal operations can be resumed:
- 5. Provide relevant emergency training so that a high level of continuous emergency preparedness is maintained; and
- 6. Provide a basis for revision of emergency procedures.

5.2.5 Emergencies and Responses

The emergency plan must **identify** and **define** the **types of emergency incidents** that could occur and their **potential impacts** on and off site.

Note: The site risk assessment should be used as a guide for this purpose.

The following are typical emergency events that may be relevant to your site and should be included along with corresponding action guidelines:

- a) Fire;
- b) Explosion;
- c) Spills;
- d) Gas leak;
- e) Natural events (e.g. earthquake);
- f) Impact events;
- q) Civil disturbances;
- h) Any other type of incident specific to the site (as identified by a risk assessment).

Initial Response

The plan must identify a staff position that will assume the role of 'emergency controller' for the site.

A hierarchy of positions should be nominated to assume the role of emergency controller when the first nominated person is unavailable, extending to a nominated person for when the site is not staffed (e.g. emergency contact person).

If the emergency incident escalates to a level requiring a response from emergency services, then the emergency controller must assume or appoint the role of emergency services liaison officer.

The plan must also nominate staff positions which will perform specific functions as required under the emergency plan (reference should be made to Australian Standard 3745 – Planning for Emergencies in Facilities).

The plan must also provide site contact details (e.g. telephone extension numbers) for nominated staff. Functions should be addressed in priority specific to the site, and include the following principles:

• Containment of hazard e.g. fire or spill (specify actions to minimise any secondary damage, if safe to do so e.g. Plant shutdown, first aid, fire fighting);

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

- Rescue (highlighting that rescuers should not place themselves in danger);
- First Aid, including possible decontamination of persons affected; and
- Emergency Procedures (must be clear, simple and achievable).

Some functions will be performed by all persons (e.g. evacuation) while others by nominated persons only (e.g. first aid).

Appropriate evacuation procedures should be included in the evacuation plan along with specific instructions applicable for the various sections/buildings and visitors to the site. The evacuation procedures should cater for both regular occupants (i.e. staff) and visitors to the site.

The evacuation of people outside of the site boundaries is the responsibility of SA Police (SAPoL).

Internal Emergency Resources

The plan should list internal emergency resources that are available, including:

- Installed firefighting equipment e.g. deluge, hydrant systems;
- Fire suppression mediums e.g. foam stocks;
- First attack (first aid) firefighting equipment e.g. Portable fire extinguishers, fire hose reels:
- Emergency Response or on site firefighting teams, where staffing levels are appropriate;
- Medical first aid equipment;
- First aid officers/teams; and
- Specialist equipment that may be available e.g. backhoes forklifts etc.

Raising Alarm

The plan should detail the actions of person/s who first notice an emergency occurrence and how they are to activate or raise an alarm. An alarm is an act of communication that necessitates an appropriate response. Pre-planned responses to raised alarms need to be included in the emergency plan.

The plan should detail procedures to ensure that the relevant emergency service is contacted. In most cases, this will be the fire service. The contact number should always be identified as '000' triple zero, not specific stations. Instructions should also be provided on information to be given to the emergency service including:

- a) Location of the site,
- b) The type of emergency,
- c) Any casualties or injuries,
- d) What assistance is required,
- e) Any hazards that may be encountered,
- f) Your name and telephone contact number.

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

Details of the types of alarm systems installed and how they are operated, tested and maintained should be included. Manual alerting instructions should be provided to initiate emergency procedures for the site (e.g. contact site's emergency controller, activate manual call points).

Contact phone numbers of adjacent facilities should be provided so that a nominated person can notify those facilities of an emergency that may have some impact upon them.

Terminating an Emergency

Once the emergency services have declared that their role is complete, control of the site will be handed back to the facility's emergency controller.

The plan should address how the site's emergency controller may deactivate the emergency plan and facilitate restoration and reconstruction activities to resume normal operations of the site.

5.2.6 Compatibility with Incident Management Plans

It is essential that the emergency plan is compatible with local emergency services operations (i.e. the plan should clearly articulate which emergency services agencies are responsible for the various types of emergencies) – refer to the South Australian State Emergency Management Plan.

The plan should clearly define when control of the emergency (and site) is required to be handed over to the relevant emergency service.

5.2.7 Administrative Matters

Emergency plans should include a consideration of procedures/requirements in the event of a failure or maintenance shutdown etc. of fire protection equipment.

In the event that any of the components of the fire protection or fire fighting equipment is rendered inoperative, the occupier must ensure the following:

- The implications of the inoperability are assessed;
- Alternative measures are taken to control, to the same level of effectiveness, those
 risks that were controlled when the equipment was functioning fully; and
- Action is taken to return this equipment to full operation.

Provisions should be made to conduct regular debriefs, responses to the media and public relations announcements.

Cooperation with statutory investigations must be ensured, particularly the need to preserve evidence for internal and/or external investigations.

The plan must specify procedures to produce a written report on the emergency event. As part of the report, the performance of the emergency plan should be reviewed regarding the emergency incident that occurred.

Irrespective of any post emergency review, the plan should be reviewed in accordance with legislative requirements and whenever changes that may affect the site occur, either on or off site (e.g. building modifications) to ensure that it remains current and effective.

5.2.8 Implementation and Testing

The emergency plan should be tested when first devised and after each modification.

Throughout the year, at suitable intervals, practice drills and simulated emergencies should be undertaken and involve all workers **and the emergency services authority**. These drills

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

should be focused on familiarising anyone who would be involved in an incident related to the storage and handling of hazardous chemicals with the workplace procedures.

SA Fire Services must be invited to all practice drills and simulated emergencies through the email address: samfsscientificofficer@sa.gov.au

5.2.9 Appendices

The appendices should include relevant supplementary information that can be used by the emergency controller, site manager and the emergency services.

Details of hazards posed by placard quantities of hazardous chemicals, explosives and security sensitive dangerous substances and control measures provided should be included.

Note: The appendices should include information which is subject to regular change (e.g. contact lists etc) so that they can be easily updated.

The requirement to provide a manifest as an inclusion to the emergency plan has been deleted to reflect current legislation that requires occupiers to prepare manifests and provide them so as to be readily accessible to emergency services at the sites main entrance. The MFS and CFS recommends that copies of any hazardous materials register, hazardous chemicals registers (may be a combined document) and Safety Data Sheets (SDS) are also readily accessible at the site's main entrance.

5.2.10 Contact List

All nominated persons should be listed including their corporate position, functional emergency role, telephone extension number, after hours and mobile numbers. Contact numbers should also be provided for adjacent facilities.

5.2.11 Location Map and Site Layout Plan

A clear location map (Figure 2) should be provided showing the site location relative to local roads and other features, and should include the following:

- a) Clearly marked site boundaries and access points (entrances/exits),
- b) Map reference,
- c) Street name and number,
- d) North point indicator, and
- e) The discharge point of the sites storm water drains (indicate if discharge point is on the map OR specify discharge point if off map).

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

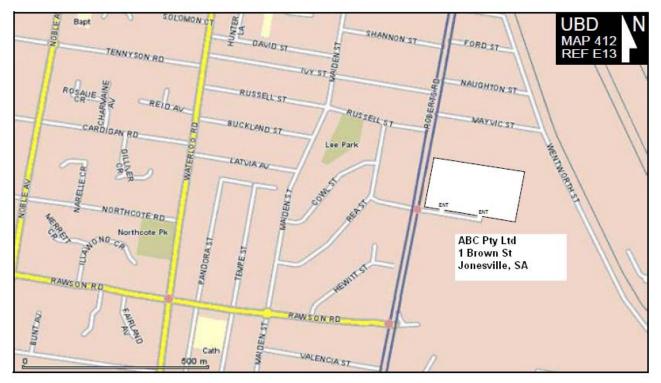


Figure 2: Sample Site Location Plan

A clear and unambiguous site layout plan (Figure 3), or series of plans, should be provided showing the layout and installed services of the site, and should include the following:

- 1. Be drawn to scale and show the direction of true north.
- 2. Include a legend that explains what any ID numbers and codes stand for.
- 3. Include a description of the activities carried out in adjoining sites or premises.
- 4. Show the location of hazardous chemicals stored in bulk and provide their identification details (for example "DGT 3")
- 5. Show the location of storage areas for packaged hazardous chemicals and IBCs and provide their identification details (for example "PS 3")
- 6. Show the location where hazardous chemicals are manufactured or generated on site and provide their identification details (for example "MA 2)
- 7. Show the areas which have been designated for chemicals that are "in transit" (for example "ITA 1")
- 8. Describe in words the location of things referred to in items 4-7 above (for example, "the chemicals at DGT 3 are located in the southern corner of the premises and can be reached by entering the main gate and heading south past DGT 4")
- 9. Show the site boundaries
- 10. Show the location of the main entrance and other places of entry to and exit from the workplace (including emergency exits)
- 11. Show any internal roadways

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

- 12. Show the assembly and safe areas
- 13. Show all fire safety equipment (e.g. boosters, hydrants, sprinklers, fire hose reels, fire/emergency control centres, PPE for site personnel etc),
- 14. Show any essential site services, including fire services and isolation points for fuel, power, bunds, pipe work and stormwater (if applicable)
- 15. Show all drainage systems
- 16. Show where the manifest and emergency plan are located
- 17. Show and provide a description of adjoining workplaces, occupancies or sites (for example "car repair shop" and "furniture factory")
- 18. Show on the site map the location of all other buildings, amenities, fences, car parks and storage areas
- 19. Include the site name, address details, and the date the plan was prepared/revised
- Include any surrounding or adjacent environmentally sensitive areas and watercourses
- 21. Include public street names adjacent to the premises and evacuation routes
- 22. Site topography

Note: Site plans for large sites should include a grid reference system similar to street directories.

To assist the emergency services, at least two additional separate laminated copies of the site layout plan/s should be kept with the emergency plan provided at the site's main entrance 'lock box' or in any 24 hour 7 day security gatehouse.

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

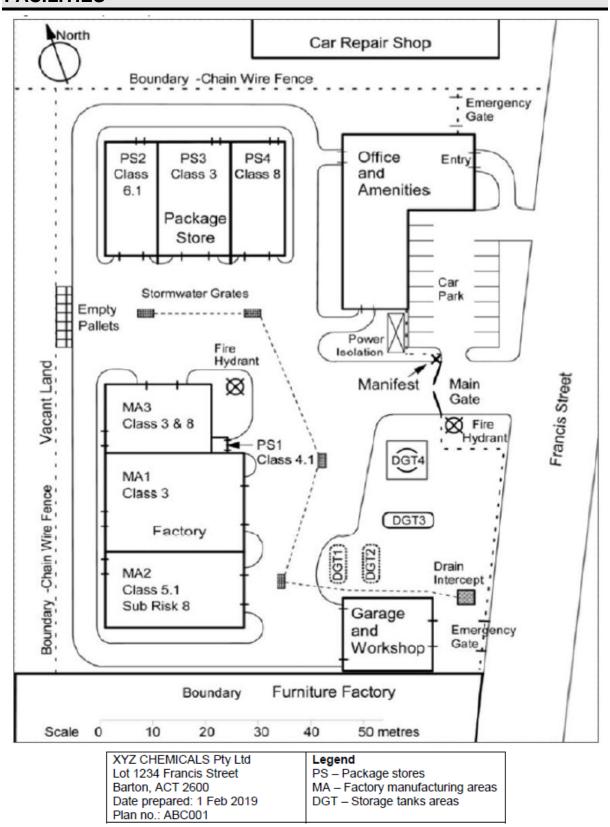


Figure 3: Sample Site Layout Plan

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

6 LOCATION OF EMERGENCY PLAN

A copy of the emergency plan and ESIP is to be provided and kept easily accessible to the SA Fire Services at all times. The following are acceptable locations for the manifest:

- a) At the hydrant booster assembly if fitted
- b) At the main site entrance adjacent to the outer warning placard
- c) Inside the security gatehouse or similar if staffs 24 hours 7 days
- d) At alternative vehicular entrances adjacent to the outer warning placard (where provided)

The plans should be provided within a prominently labelled weather proofed container (e.g. a lock box), secured with a 003 lock if unauthorised access needs to be prevented.

The container should be readily identifiable and prominently labelled. The SA Fire Services prefer the container to be coloured red with white "Emergency Information" and "HAZMAT" lettering, minimum 40mm height, across the front of the container.

A full copy of the above documentation (emergency plan, ESIP, manifest, hazardous chemicals register and SDS) should be provided in any dedicated Emergency/Fire Control Centre. At larger sites, the MFS and CFS recommends, that as a minimum, a copy of the ESIP is provided at appropriate locations throughout the site e.g. within process control rooms or adjacent to locations where placards are required by the WHS Reg.

Note: At sites where there may be security concerns regarding the provision of plans in a locked container on site (e.g. schools etc), application can be made for alternative locations or means to provide responding emergency services with copies.

7 REFERENCES

- Emergency Plans Factsheet, Safework Australia, 2012.
- Explosives (Security Sensitive Ammonium Nitrate) Proclamation 2006, Gazette 25.1.2006 p348, Adelaide, South Australia.
- Guide for Major Hazard Facilities Emergency Plans, Safework Australia, 2012.
- Hazardous Chemical Register Template, Safework Australia, 2019.
- Hazardous Chemicals Example of a Site Plan, Safework Australia, 2019.
- Hazardous Chemicals Manifest Template, Safework Australia, 2019.
- Managing Risks of Hazardous Chemicals in the Workplace Code of Practice, Safework Australia, 2018.
- Work Health and Safety Bill, South Australian Government, 2012, Adelaide South Australia.
- Work Health and Safety Regulations (Draft), South Australian Government, April 2012, Adelaide South Australia.

8 FURTHER ASSISTANCE

The development of an emergency plan by persons not familiar with hazardous chemicals hazards and consequences, and emergency planning in general may result in a deficient

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

emergency plan. Unfortunately, shortcomings in emergency plans may not become apparent until an emergency incident occurs.

If you are unfamiliar with the process of assessing hazardous chemicals hazards and risks, or not sure, that you will be able to develop a satisfactory document, the MFS and CFS recommends the services of a suitably qualified hazardous chemicals consultant be engaged to assist in the development of your emergency plan.

Note: Many hazardous chemicals consultants are members of the Australian Institute of Dangerous Goods Consultants (see http://www.aidgc.com/index.html).

EMERGENCY PLANS AT FACILITIES HAVING NOTIFIABLE QUANTITIES OF HAZARDOUS CHEMICALS AND MAJOR HAZARD FACILITIES

ANNEX A EMERGENCY PLAN TEMPLATE

The following is an example of the template structure of an emergency plan:

- a) ESIP
- b) Title page,
- c) Table of Contents,
- d) Distribution List,
- e) Amendments,
- f) Glossary and Abbreviations,
- g) Introduction,
- h) Aim and Objective of Plan,
- i) Types of Emergencies,
- j) Response Actions,
- k) Raising Alarm,
- I) Terminating an Emergency,
- m) Compatibility with Incident Management Plans,
- n) Administration of Plan,
- o) Exercises and Training,
- p) Appendices,
 - i. Hazardous Materials and Dangerous Goods Manifest,
 - ii. Nominated Persons and Contact Numbers,
 - iii. Location Map and Site Layout Plan.