

# Environmental guidelines:

# Preparation of pollution incident response management plans

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#### 1 Introduction

The purpose of these guidelines is to assist the holders of an environment protection licence to comply with the new requirements introduced by the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) to prepare and implement a pollution incident response management plan.

These guidelines set out specific requirements regarding the preparing, keeping, testing and implementation of these plans.

### 1.1 Background

The POELA Act introduces several changes to improve the way pollution incidents are reported, managed and communicated to the general community. The Act includes a new requirement under Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act) to prepare, keep, test and implement a pollution incident response management plan.

The objectives of these plans are to:

- ensure comprehensive and timely communication about a pollution incident to staff at the
  premises, the Environment Protection Authority (EPA), other relevant authorities
  specified in the Act (such as local councils, NSW Ministry of Health, WorkCover NSW,
  and Fire and Rescue NSW)<sup>1</sup> and people outside the facility who may be affected by the
  impacts of the pollution incident
- minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks
- ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

# 2 Legislative requirements

The specific requirements for pollution incident response management plans are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO(G) Regulation).<sup>2</sup> In summary, this provision requires the following:

- All holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of trackable waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the plan in accordance with the POEO(G) Regulation (clause 98E).

<sup>&</sup>lt;sup>1</sup> See www.environment.nsw.gov.au/pollution/notificationprotocol.htm

<sup>&</sup>lt;sup>2</sup> As amended by the Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012: see www.legislation.nsw.gov.au/sessional/siew/sessional/sr/2012-54.pdf

 If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan (section 153F, POEO Act).

### 2.1 Definition of 'pollution incident'

The definition of a pollution incident is:

pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

- (a) harm to the environment is material if:
  - (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
  - (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- (b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Industry is now required to report pollution incidents *immediately* to the EPA, NSW Health, Fire and Rescue NSW, WorkCover NSW and the local council. 'Immediately' has its ordinary dictionary meaning of promptly and without delay. These strengthened provisions will ensure that pollution incidents are reported directly to the relevant response agencies so they will have direct access to the information they need to manage and deal with the incident in a faster time.

There are new associated offences, for individuals and corporations, for not preparing a plan, not keeping the plan at the premises to which it relates, not testing the plan in accordance with the Regulations and not implementing the plan in the case of an incident.

#### 2.2 New Regulation

An amendment to the POEO(G) Regulation has been made (by the Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012) with the object of specifying additional matters that need to be included in plans. These new requirements are described in Section 3 below.

# 2.3 Obligations and transitional period for complying with the requirements

These provisions commenced on 29 February 2012.

Holders of an existing environment protection licence will need to prepare and be able to implement a pollution incident response management plan by 1 September 2012. New licensees will need to have a plan in place prior to commencing operations.

# 3 General requirements for preparing pollution incident response management plans

*Note:* In the following discussion, use of the term 'section' refers to provisions in the POEO Act and 'clause' to provisions of the POEO(G) Regulation.

### 3.1 Form of plans [section 153D and clause 98B(1)]

As the purpose of plans is to improve the management of pollution incidents and facilitate better coordination with the relevant response agencies, they must be able to be provided in written form, and be available at the premises and able to be provided to an authorised EPA officer on request. While plans can be prepared and stored in other forms, a written copy must be available to an authorised EPA officer and to any person who is responsible for implementing the plan.

### 3.2 Relationship with other emergency plans [clause 98B(2)]

Many licensed premises already have a plan (or equivalent plan, which may be known as an emergency response plan, emergency plan or incident response plan). These plans may have been prepared to comply with legislation such as the Work Health and Safety Regulation 2011, conditions of consent issued under the *Environmental Planning and Assessment Act 1979*, an environment protection licence issued under the POEO Act or other regulatory instruments.

A licensee who already has a plan or equivalent plan in place is not necessarily required to prepare a new or separate plan under these legislative changes. A plan may form part of another existing emergency or incident management plan as long as the information required to be included in the plan is readily identified in another document as meeting the requirements of section 153C of the POEO Act and the POEO(G) Regulation.

If an existing emergency plan is to be used to meet these new regulatory requirements that plan must be closely reviewed and, if necessary, amended to ensure that it covers all the matters listed in section 153C of the Act and is kept, tested and implemented in accordance with sections 153D, 153E and 153F of the POEO Act and with the POEO(G) Regulation. If the plan does not comply with these legislative requirements, it must be amended by 1 September 2012 to comply with the Act.

#### 3.3 Details to be included in plans

All licensees except for waste transporters need to include the following information as a minimum. Holders of waste transporter licences have separate requirements detailed in Section 3.4 below.

#### 3.3.1 Description and likelihood of hazards [clause 98C (1)(a) and (b)]

Plans must provide a description of the main hazards to human health or the environment associated with the activity being undertaken at the premises, the likelihood of any such hazards occurring, including details of any circumstances or events that could, or would, increase that likelihood. Potential hazards could include the storage of chemicals, waste materials, wastewater such as effluent or contaminated stormwater, the potential failure of containment tanks, the uncontrolled release of gas, and the flooding of effluent storage dams.

Licensees of a facility near a sensitive environment, such as a densely populated area, school, hospital or water body, must consider the increased risks of environmental or health impacts of a pollution incident.

Licensees of a facility which is located near other facilities which handle dangerous or explosive materials must consider the likelihood of any impacts on neighbouring facilities and consider employing measures to reduce or minimise impacts from a pollution incident which could set off a pollution incident at those facilities.

#### 3.3.2 Pre-emptive actions to be taken [clause 98C(1)(c)]

Plans must include detailed descriptions of the pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or the environment arising from the activities undertaken at the premises. Pre-emptive actions can include the provision and use of spill containment kits, the installation and operation of stormwater cut-off valves, and the installation and use of fire-containment water tanks.

#### 3.3.3 Inventory of pollutants [clause 98C(1)(d) and (e)]

Plans must include an inventory of potential pollutants kept on the premises or used in carrying out activities at the premises, including the maximum quantity of any potential pollutant that is likely to be stored or held at the premises. Pollutants can include, but are not limited to, chemicals used in cleaning or production processes, fuels and lubricants used for equipment or machinery, gas cylinders, waste materials or wastewater, effluents and sediment-contaminated stormwater.

Details of the pollutant storage locations, including underground storage tanks and storage methods, must also be included. See the requirement for a map in Section 3.3.8 below.

#### 3.3.4 Safety equipment [clause 98C(1)(f)]

Plans must include a description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident. Specific details must be provided in relation to any site or activity-specific safety equipment and must include the location where this equipment is stored and the material safety data information for any chemicals or fuels used or stored at the premises. For example, this could include specific personal protective equipment required for the handling of hazardous chemicals or radioactive substances, specific gas monitoring meters used to monitor gas leaks from tanks, floating booms used to contain spills on water bodies, and specific spill containment equipment.

#### 3.3.5 Contact details [clause 98C(1)(g) and (h)]

Plans must include the names, position titles and 24-hour contact details of those key individuals who are responsible for activating the plans and managing the response; those authorised to notify relevant authorities, including all five relevant authorities under section 148 of the POEO Act; and those responsible for managing the response to a pollution incident. The EPA has developed a notification protocol (available at www.environment.nsw.gov.au/pollution/notificationprotocol.htm).

In addition, plans must include the contact details of the EPA, the local council, NSW Ministry of Health, WorkCover NSW, and Fire and Rescue NSW, relevant to the licensee's premises. The contact details of any other organisation or agency that needs to be advised of the incident should also be included in plans, for example the Department of Planning and Infrastructure, and Department of Primary Industry.

#### 3.3.6 Communicating with neighbours and the local community [clause 98C(1)(i)]

Communicating with neighbours and the local community is an important element in managing the response to any incident. Plans must include details of the mechanisms that will be used for providing early warnings and regular updates to the owners and occupiers of premises who may be affected by an incident occurring on the premises. Communication mechanisms can include incident notifications placed on the licensee's website or social media networks (such as Twitter or Facebook); the use of telephone calls or SMS or other messaging systems; emails to community representatives (for example, a protocol agreed to via a community consultative committee process); and letterbox drops and doorknocking of affected community members, as appropriate to the circumstances.

Plans must also include any specific information that could be provided to the community so it can minimise the risk of harm. For example, this could include instructions to close windows and doors and remain inside for incidents involving emission of air pollutants, or avoiding the use of water in creeks or rivers affected, or likely to be affected, by a pollutant discharge.

The licensee must consider the types of pollution incidents that are likely to occur at the premises. Examples are discharge of a pollutant to a stormwater system or creek, or an unplanned release of an air pollutant into the atmosphere. In the example of the discharge to the stormwater system, the licensee must notify premises that are adjacent to the stormwater system or creek and consider any downstream users, such as holders of water irrigation licences, recreational water facilities and oyster growers.

In determining the extent of community notification for potential air emissions, the licensee should consider aspects such as the type of pollutant, prevailing winds, height and magnitude of an emission, as well as the location of any on-site fallout or off-site impacts, the likelihood of the pollutant reaching ground level, and possible impacts on sensitive receptors.

As the location, geography and proximity to neighbours varies for each licensed premises, each licensee must consider the types of pollutant incidents that are likely to occur at the premises and the extent to which those incidents may have an impact on neighbouring industrial, residential or community premises. Consideration must be given to notifying any sensitive premises in close proximity, such as schools, pre-schools, nursing homes and hospitals.

#### 3.3.7 Minimising harm to persons on the premises [clause 98C(1)(j)]

Plans must include any actions or arrangements that will be in place to minimise the risk of harm to any persons who will be on the premises or who are likely to be on the premises should an incident occur. These can include the activation of evacuation procedures, clearly advertising muster locations to site personnel, or activating visible and/or audible warning alarms. Consideration should also be given to having available at short notice suitable consultants to provide expert medical, toxicology or environmental impact advice.

#### 3.3.8 Maps [clause 98C(1)(k)]

Plans must include a detailed map (or set of maps) showing the location of the premises, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises, the location of any stormwater drains on the premises, and the discharge locations of the stormwater drains to the nearest watercourse or water body.

# 3.3.9 Actions to be taken during or immediately after a pollution incident [clause 98C(1)(I)]

Plans must include detailed descriptions of the actions that will be taken by the licensee immediately after a pollution incident to reduce or control any pollution. These should include, as a minimum, early warnings, updates and actions to be taken during and after an incident. Actions may include the deployment of spill containment equipment, activation of stormwater shut-off valves, and shutdown of processes or equipment. Consideration must also be given to assessing how any clean up from an incident will be undertaken, including the procedures to be followed such as the engagement of contractors and use of clean-up equipment like waste disposal tankers and waste disposal facilities.

As the costs associated with the clean up of an incident can be significant – in past cases these have been in excess of \$1 million – consideration must also be given to funding arrangements, such as taking out appropriate insurance or having contingency funds available. The cost of any clean up that is undertaken by emergency response agencies and the EPA will generally be recovered from the company or individual responsible for the pollution incident.

#### 3.3.10 Staff training [clause 98C(1)(m)]

Plans must include details on the nature and objectives of any staff training program on implementing the plans. Details of the training program must include the frequency of training and how the records of any training are kept. Suitable training could include toolbox talks, formal staff training on incident management, and undertaking simulated incident exercises, including with emergency services. The training needs to be suitable for the level of risk and likelihood of incidents at the premises.

### 3.4 Transporters of trackable waste

The holders of a licence to transport trackable waste need to develop plans that contain the following information.

#### 3.4.1 Contact details [clause 98C(2)(a) and (b)]

Plans must include the names, position titles and 24-hour contact details of key individuals who are responsible for activating the plan, notifying relevant authorities under section 148 of the POEO Act, and managing the response to a pollution incident.

In addition, plans must include the contact details of the EPA, WorkCover NSW, and Fire and Rescue NSW, relevant to the location of an incident. In addition, they must show how the details of the relevant local council and area health service (such as the NSW Ministry of Health) specific to the location of the incident will be determined and who will contact those authorities. For example, this might be the responsibility of personnel at the waste transport company's base of operations.

Plans should specify the role of the driver and the roles of the people implementing the notification requirements. The EPA will provide a simple template for waste transporter plans as an addendum to this guideline.

#### 3.4.2 Communicating with the community [clause 98C(2)(c)]

Communicating with the community affected by a pollution incident from a vehicle operating under a licence to transport waste is an important element in managing the response to any incident. Plans must include a community engagement protocol that provides procedures for notifying the community members living or working in the vicinity of the pollution incident and keeping them informed of relevant matters. Communication mechanisms must be coordinated with emergency services personnel responsible for managing the response to the incident.

#### 3.4.4 Actions to be taken [clause 98C(2)(d)]

Plans must include detailed descriptions of the pre-emptive actions that need to be taken by the licensee to prevent any risk of harm to human health or the environment arising out of the activities undertaken by the licensee. Details of the actions that will be taken immediately after a pollution incident to reduce or control any pollution include, as a minimum, action that complies with the requirements set out in clause 49 of the Protection of the Environment Operations (Waste) Regulation 2005 as detailed below.

#### 49 Requirements relating to transportation of waste generally

A person who transports waste (whether or not required to hold a licence) must comply with the following requirements:

- (a1) the transportation of waste must be carried out in a manner that avoids the spillage of the waste.
- (a) any vehicle or plant used for the transport of the waste must be constructed and maintained so as to prevent spillage of the waste,
- (b) any container used to transport the waste must be secured safely on the vehicle used to transport the waste,
- (c) any waste that is transported by a vehicle must be covered during its transportation unless the waste consists solely of tyres or scrap metal (or both),
- (d) incompatible wastes must not be mixed or transported together on any vehicle used by the person to transport waste,
- (e) any material segregated for recycling that is transported by the person must not be mixed with other waste,
- (f) liquid waste must not be mixed with other waste,
- (g) the waste must be able to be sampled by the release of suitable and accessible valves located on the top and, where appropriate, bottom of any container used to transport the waste,
- (h) the following must be carried in the vehicle transporting the waste:

- (i) a copy of any environment protection licence required to authorise the transport of the waste.
- (ii) HB 76-2004: Dangerous Goods-Initial Emergency Response Guide, published by Standards Australia (the Standards Australia Guide) or a document setting out procedures to be followed in an emergency and containing all information from the Standards Australia Guide that relates to the type of waste being transported,
- (iii) a spill kit that is appropriate for the type of waste being transported.

#### 3.4.5 Staff training [clause 98C(2)(e)]

Plans must include details on the nature and objectives of any staff training program on implementing the plans. Details of the training program must include the frequency of training, how the training is documented and the period the records will be kept. Training could include toolbox talks, formal staff training on incident management, undertaking simulated incident exercises, including with emergency services. The training needs to be suitable for the level of risk and likelihood of incidents.

## 4 Making plans available [clause 98D]

A copy of each plan must be maintained at the premises to which the relevant licence relates, or where the relevant activity takes place, so that it is readily available to those responsible for its implementation and to an authorised officer on request.

Some sections of the plans must be made publicly available within 14 days after they have been prepared by:

- placing them in a prominent position on a publicly accessible website of the licensee
- providing copies of them, without charge, to any person who makes a written request for a copy if the licensee does not have a website.

A publicly accessible website could include a website established to promote the licensee's activities or products.

The information to be made available to the public:

- must include the procedures for contacting the relevant authorities including the EPA, local council, NSW Ministry of Health, WorkCover NSW, and Fire and Rescue NSW
- must include the procedures for communicating with the community described in Sections 3.3.6 and 3.4.2 above
- may be exclusive of any personal information within the meaning of the *Privacy and Personal Information Protection Act 1998*.

# 5 Testing plans [clauses 98C(1)(n),(o) and (p), 98C(2)(f) and (g), 98E(1) and 98E(2)]

Plans must be tested routinely at least once every 12 months. The testing is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date, and that each plan is capable of being implemented in a workable and effective manner. This is also applicable to plans prepared by waste transporters.

The two usual methods of testing are undertaking desktop simulations and practical exercises or drills. Testing must cover all components of the plan, including the effectiveness of training.

Plans must include details such as:

- the manner in which they are to be tested and maintained
- the dates on which they have been tested and the name of the staff members who carried out the testing
- the dates on they are updated.

Plans must also be tested within one month of any pollution incident occurring in the course of an activity to which a licence relates to assess, in the light of that incident, whether the information included in the plan is accurate and up to date, and the plan is still capable of being implemented in a workable and effective manner.

# 6 Implementing plans

If a pollution incident occurs in the course of an activity at the premises so that material harm to the environment (within the meaning of section 147) is caused or threatened, the person carrying out the activity must immediately implement any pollution incident management response that was developed to meet the requirements of the POEO Act.