

Pollution Incident Response Management Plan (PIRMP)

Fenwicks Marina



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Section 1 -- Background

1.1 Reasons for this PIRMPⁱ

Protection of the Environment Legislation Amendment Act 2011 (POELA Act) introduced several changes to improve the way pollution incidents are reported, managed and communicated to the general community. The Act included a new requirement under Part 5.7A of the *Protection of the Environment Operations Act 1997* (PEO Act) to prepare, keep, test and implement a pollution incident response management plan.

The Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans (PIRMP)) Regulation 2012 requires the holder of an Environment Protection License to have a printed PIRMP available onsite. It was a requirement for all holders of Environment Protection License to have a PIRMP in place by 1 September 2012.

Changes to legislation relating to the 'duty to notify' were enacted on 6 February 2012 in accordance with s.148 of the Act such that 'if there is a risk of **material harm** to the environment, pollution incidents are to be notified immediately to the EPA, NSW Health, Fire & Rescue NSW, WorkCover NSW and the local council.' The provisions came into effect on 29 February 2012.

1.2 Objectives of this PIRMP

This PIRMP has been prepared in accordance with the requirements of Part 5.7A of the Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012.

The objectives of this plan are to:

- Ensure timely and comprehensive communication about a pollution event to the Appropriate Regulatory Authority and other agencies, and to other people who may be affected by the event
- Minimise and control the risk of a pollution incident by identifying risks and developing suitable control measures
- Ensure the plan is properly implemented by trained staff, identify persons responsible for implementing it, and ensuring the plan is regularly tested for accuracy, currency and suitability

1.3 Information included in this PIRMP

Section 2 of this PIRMP (Plan Components) includes the information specified by s153C of the Protection of the Environment Legislation Amendment Act 2011 and the additional details prescribed by the Protection of the Environment Operations (General) Regulation 2009.

1.4 Definitions

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 a set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident involving only the emission of any noise.

Material Harm means:

- i. it involves actual or potential harm to the health or safety of people 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

- iii. 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.

Relevant authority means any of the following:

- a) the appropriate regulatory authority,
- b) if the EPA is not the appropriate regulatory authority—the EPA,
- c) if the EPA is the appropriate regulatory authority—the local authority for the area in which the pollution incident occurs,
- d) the Ministry of Health,
- e) the WorkCover Authority,
- f) Fire and Rescue NSW.

1.5 Legislation and Guidance Material

This plan has been prepared with reference to the following legislation and guidance material:

- Protection of the Environment Operations **Act** 1997 Number 156
- Contaminated Land Management **Act** 1997 Number 140
- Contaminated Land Management **Regulation** 2013
- Protection of the Environment Operations (General) **Regulation** 2009
- Protection of the Environment Operations (UPSS) **Regulation** 2008
- Protection of the Environment Legislation Amendment Bill 2011
- Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012
- Environment Protection Licenses (various – site specific)
- Environmental Guidelines: Preparation of Pollution Incident Response Management Plans (PIRMPs) – NSW Environment Protection Agency
- Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008

1.6 Other documents referenced by this PIRMP

This plan makes reference to and relates to site specific Environmental Plan of Management (prepared by Andrew Fenwick) Fenwicks Marina, Hawkesbury River.

1.7 Duty to report a Pollution Incident - Requirements of an EPA License:

R2 Notification of environmental harm

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within seven days of the date on which the incident occurred.

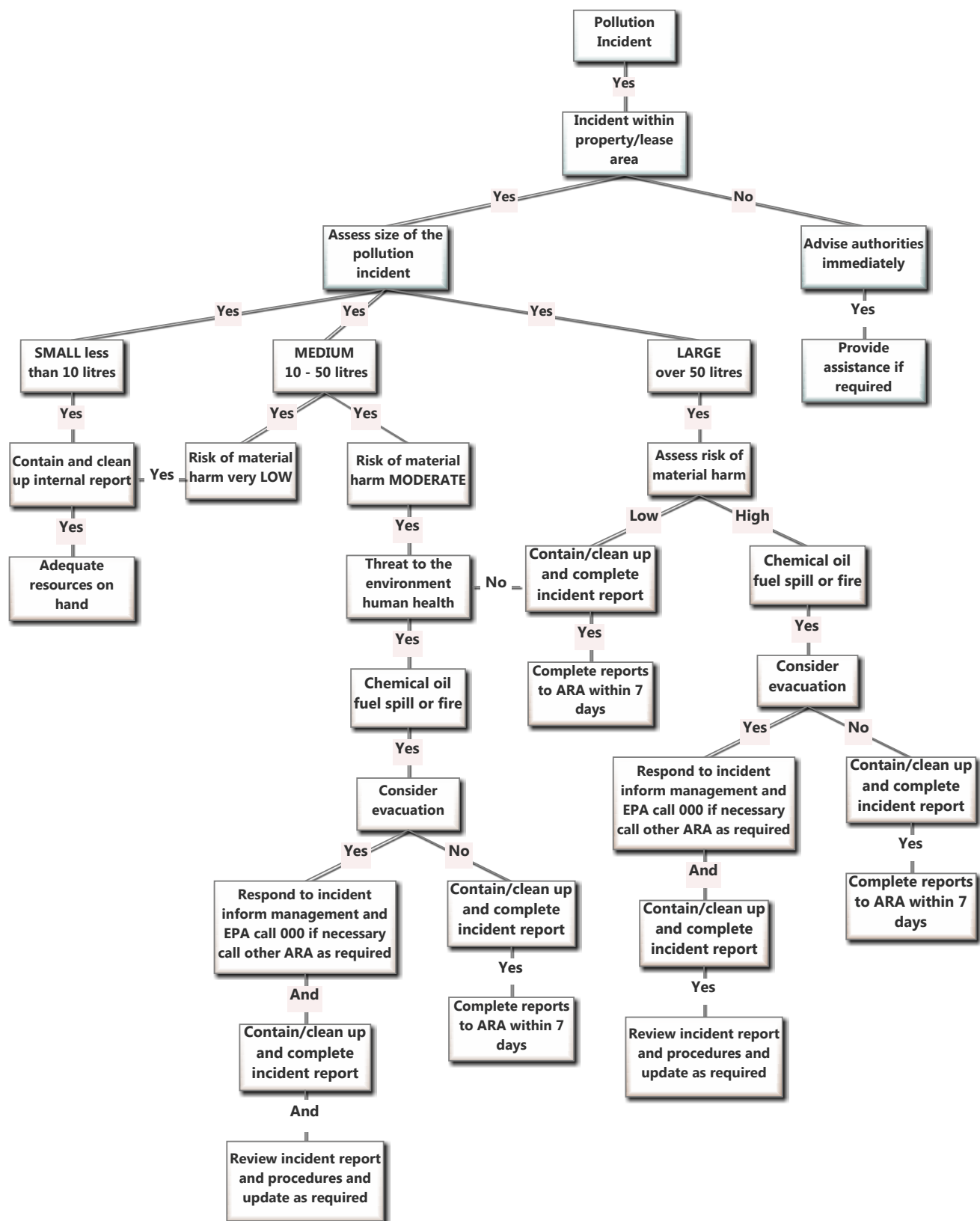
Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

1.8 Failure to report a Pollution Incident

Maximum Penalties under the Act:

- a) in the case of a corporation—\$2,000,000 and, in the case of a continuing offence, a further penalty of \$240,000 for each day the offence continues, or
- b) in the case of an individual—\$500,000 and, in the case of a continuing offence, a further penalty of \$120,000 for each day the offence continues

Section 2- Pollution Incident Decision Flowchart



Section 3 – Plan Components

A. Relevant Activity

There are many types of potential hazards to human health or the environment associated with the activity of operating a marina. The primary hazards associated with the site are:

Chemical product spill - hazard to the environment and health.

- ✓ Hydrocarbon spill into waterway (Diesel or Petrol) – hazard to environment
- ✓ Fire risk of Diesel, Fire and explosion risk of Petrol – hazard to health

A collection of most likely events that could lead to a ‘Pollution Incident’ are list below in Table B-1.

B. Likelihood of any such hazards occurring

The following Table B-1 details conditions or events that could, or would increase the likelihood of a pollution event occurring.

Table B-1 – Pollution Incident hazards and likelihood of occurrenceⁱⁱ

POLLUTION INCIDENTS	PRIMARY CONTROLS	LIKELIHOOD
Fire damage and subsequent loss of product from fuels infrastructure	Firefighting equipment, Emergency Procedures and staff training	Low
Seismic activity resulting in pipeline fracture	All pipe work contained within a close distance of tanks. Tanks and dispensing units all on land.	Low
Flooding resulting in product escapement from tanks	Fuel tanks sealed systems – all points of water entry inspected regularly and maintained by specialist contractor	Low
Severe weather event resulting in damage to Marina infrastructure and subsequent fracture of pipeline components	Isolation switch on controls to minimize any spills.	Low
Acts of vandalism or target for terrorist/environmental activity	CCTV at Marina. Daily monitoring of tanks and equipment	Low
Corrosion damage to pipeline or fuel tank leakage	Routine infrastructure inspections and regular maintenance conducted by staff and specialist contractors. Medium and long-term planning for upgrading and replacement of components. Cathodic protection fitted	Low
Mechanical failure of pipeline, storage and dispensing components/infrastructure	Routine infrastructure inspections and regular maintenance conducted by staff and specialist contractors. Medium and long-term planning for upgrading and replacement of components.	Low
Internal leaks at dispensing equipment	Dispensing equipment has bunding below, which is inspected daily	Low

Fuel spillage during dispensing of fuel	Staff always on hand during dispensing of fuel. Spill kit at fuel dock - the only area fueling is allowed.	Low
Fuel spillage from vessel fuel system and bilge pump system	Staff and tenants trained in monitoring our surrounds. Marina dock walks performed morning and afternoon.	Low
Spill of fuel or chemical from vessel on hardstand	Area is sealed, drained and banded. Can be isolated for appropriate clean up	Low
Chemical leak from onsite land storage	All paints and chemicals are stored in banded hazardous goods locker	Low

C. Details of pre-emptive actionⁱⁱⁱ

The marina ensures that every effort is taken to minimise or prevent any risk of harm to human health or the environment arising out of any relevant pollution incident.

Fenwicks Marina regularly engages specialist contractors and advisors for the following services:

- Inspection and routine maintenance of fuel systems
- Environmental operations manuals and procedures
- Staff training in Emergency Incident response
- Risk assessments and infrastructure assessments
- Compliance auditing

The purpose of engaging specialist contractors is partly preventative, and partly planning to respond to unplanned events.

In the event of a fuel spill, leak, or other harmful incident, the Operations Manager and employees of Fenwicks Marina will follow the company's EMERGENCY RESPONSE PROCEDURES and POLLUTION INCIDENT DECISION flowcharts, both of which have been designed to assist in responding to incidents of this nature.

D. Inventory of potential pollutants

This segment details the type of potential pollutants stored on the site and where they can be found within the marina. Details are in the following documents:

- ✓ Environmental Protection License number 10894
- ✓ Hazardous Chemicals (and Substances) Register
- ✓ Dangerous Goods Licence and Manifests
- ✓ UPSS Management Plan

E. Maximum quantity of pollutants stored

The quantity of potential pollutants stored or held at particular locations is set out in the following documents:

- ✓ UPSS Management Plan
- ✓ Dangerous Goods Manifest

F. Description of Safety Equipment

Part F is 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.

- ✓ Spill response kits located at Fuel Dock (contents include absorbent pads and 30metre boom & fire extinguisher)
- ✓ Fire fighting equipment including fire reels
- ✓ Isolation switches for fuel system at building and fuel dock
- ✓ Personal Protective Equipment
- ✓ 50 ltr High Pressure Foam firefighting unit

G. Contact details for activation, notification and response

Table G – 1 contains the names, positions and 24-hour contact details of those key individuals who: (i) are responsible for activating the plan, (ii) are authorised to notify relevant authorities under section 148 of the Act, and (iii) are responsible for managing the response to a pollution incident, (h) the contact details of each relevant authority referred to in section 148 of the Act).

Table G – 1 Notification and response details

Details	Name of authorised person	Position	Contact 24-hour
Plan activation	Timothy Fenwick	Executive Director Operations Manager	0402 991 743
Notification to authorities	Andrew Fenwick CMM	Managing Director	0427 923 457
Pollution response			
Relevant authorities contact details			
EPA (or the Appropriate Regulatory Authority (ARA))	Environmental line	Take note of EPA reference number	131 555
NSW Health Local Public Health Line (see www for local unit)			1300 066 055
Work Cover	Option 2 EPA reference number required		13 10 50
Local authority	Hornsby Shire Council		9847 6666
Fire and Rescue			000

Details	Name of authorised person	Position	Contact 24-hour
Adjoining businesses /tenants/others at risk	Callaghans Marine Engineering		0425 307 320 Steve
	Elmes Brothers Shipwright Services		0422 733 731 Michael 0432 648 534 Ben
	Bird Electrical		0426 267 300 Peter
	A&B Covers		0414 993 669 Alan

H. Contact details of relevant authorities

Refer to Table G – 1 for the contact details of each relevant authority referred to in section 148 of the Act. The NSW Environment Protection Authority (EPA) was established in February 2012 as a statutory authority with an independent governing Board. This website found at <http://www.epa.nsw.gov.au/> contains information about environmental regulation and protection managed by the EPA.

I. Warnings and Updates

This section of the PIRMP contains details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of Fenwicks Marina, in particular notices about testing using simulated incidents. This ensures that the scheduled test activity does not unduly concern the community.

Communicating with owners and occupiers of local premises / the community^{iv}

The Operations Manager, or nominated representative of **Fenwicks Marina**, upon becoming aware of a notifiable pollution incident or event shall assess the severity of the incident with regards to impact on:

- Owners, tenants and occupiers of local premises
- the community

The following should be considered:

- Does the pollution incident have the potential to affect a business, household or operation?
- How will it affect them (short and long term)?
- What actions need to be taken by the properties to protect them from harm?

Subject to approval by the Operations Manager (or other delegated person), contact will be made with affected properties/premises through SMS where neighbour telephone numbers are available or a door knock and/or letter drop to provide the following information relevant to the pollution incident:

- What has happened
- The environmental and, or safety implications for them
- Actions taken or being taken to minimise harm or risk
- What to expect
- Contact details for further queries or concerns

In addition, and where deemed necessary, information may be published on the **Fenwicks Marina** website, Facebook page, or communicated via other social media channels. This is subject to approval.

J. Arrangements for minimising the risk of harm^v

These arrangements are necessary to ensure any persons who are on the premises or who are present when an incident occurs, can be quickly evacuated to a safe area when activation of emergency procedures is in process. Fenwicks Marina has available at short notice, suitable consultants to provide expert medical, toxicology or environmental impact advice should that be required.

If a pollution incident provides an immediate risk of harm to persons within, or beyond the site boundary, the evacuation procedures shall be followed. Evacuation procedures are contained within the Marina Emergency Procedures document, stored on the ground floor beside stairs.

K. Detailed maps

Should a pollution incident occur in the area surrounding Fenwicks Marina, detailed site maps and diagrams, showing the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any storm water drains on the premises, are provided within the following documents:

- Environment Management Plan
- Site location plan
- Site Plan (Marina and Buildings)
- UPSS Management Plan
- Dangerous Goods Licence

Map 1 The wider picture

The Following map 1 shows a yellow rectangle [inset] consisting of FENWICKS MARINA and gives its position in relation to the Hawkesbury River Road Bridge M1 (top left), Long Island (centre) and Sandbrook Inlet (leading away to the right of Fenwicks) which is blocked by the Hawkesbury River Rail causeway. See the next map 2 for detail.



Red lines are boundaries of possible LARGE pollution incident.
Yellow lines represent the closest mangrove communities.
Black rectangle represents the bunded hardstand area

Blue hatching represents the whole of the area that may be impacted by a large pollution incident.



L. Detailed description of how any identified risk of harm to human health will be reduced

Pollution incidents have the potential to escalate quickly, and a rapid response will help to reduce the risk, or effects of such harm. Employees of Fenwicks Marina, will do everything possible, including adequate resourcing to limit the effects of any leak or spill. The following considerations have been made:

Raising the alarm – the marina Emergency Procedures provide the method and means of raising the alarm and responding to an incident

Limiting the extent of pollution – isolation switches are provided at the building and fuel dock and shall be operated immediately upon notification of a leak or spill to river.

Containing pollution – the spill kit contents shall be deployed to contain any spill in accordance with training provided

Disposal of contaminated waste – any contaminated spill equipment shall be disposed of as contaminated/hazardous waste, depending on the product or fuel contained. A specialist waste contractor with experience and facilities to dispose of such waste will be engaged when necessary

M. The nature and objectives of any staff training program

Section 153D [clause 98C(1)(m)] of the Act specifies the requirements for adequately training staff on all procedures necessary for them to safely and efficiently tackle pollution incidents. This includes both informal and formal staff training and at times simulated exercises that may be held in conjunction with local emergency services.

All employees of Fenwicks Marina are provided with training on response to a pollution incident, this being part of the integrated Environment, Health & Safety Management System (EHSMS).

Specific details of training provided to workers and Marina Managers can be found within the following pages of the system:

- ✓ Training and Induction
- ✓ New Employee Induction Checklist

N. Dates on which this plan has been tested

This Pollution Incident Response Management Plan is to be tested at least 12 monthly and records of such testing shall be noted in yearly audit reports and recorded with staff HWS and training records.

The testing is carried out in such a manner as to ensure that the information included in this plan is accurate and up to date, and that the plan is capable of being implemented in a workable and effective manner.

Fenwicks Marina uses testing days as ways to enhance the quality of services provided to customers as well as an opportunity to reinforce health and safety procedures for staff who can then effectively and efficiently deal with any pollution incident should such a one occur.

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

O. Updates and revisions to the PIRMP

This Pollution Incident Response Management Plan shall be revised:

- At least every 12 months or,
- When there are legislative changes that require updates to PIRMPs or,
- Where a significant pollution incident has occurred that has resulted in material harm or,
- Where a pollution incident has occurred and an internal report has specified the revision of this PIRMP

P. The manner in which the plan is to be tested and maintained^{vi}

Under Section 153E testing is carried out to ensure the information within this plan is accurate and up to date, and capable of being implemented in a workable and effective manner.

Table P – 1 Details of PIRMP testing

Date of testing	Type of test conducted (Desktop/Drill)	Observation and components of plan tested	Improvements required (including modifications to future training)
30 04/2018	Drill – Facility Evacuation	Yes, Observers and staff participants plan tested	Satisfactory result
20/06/2018	Training session for fire equipment	Yes, observers, fire equipment and plan tested	All equipment OK - Emergency policies reviewed
04/07/18	Desktop	Marina Pollution Research results reviewed and discussed	Actions taken and programs updated
21/08/2018	Safety equipment checked and inspected	Yes, Observers and staff participants plan tested	Warden report listed future drills to utilize equipment
1/11/2018	Desktop	Yes, updated contacts and checked plan	Yes – update to major maintenance plan.

Q. Public Information

On the Fenwicks Marina Facebook page and Website is a link to the EPA Website: <http://www.epa.nsw.gov.au> that includes procedures that should be followed if a pollution incident did occur, the names of relevant authorities with contact details.

A copy of the public PIRMP is provided, on request to the Operations Manager. This 'public' version of the PIRMP contains procedures for contacting the relevant authorities, and procedures for communicating with the community. A current copy can be viewed on Fenwicks Marina website under Marina/Environmental.

Section 4 – REPORTING

All pollution events and spills, excluding small spills, are to be reported through the Marina office.

An Underground Petroleum Storage System (UPSS) Leak Report is to be completed when there is, or has been, a fuel leak within the system.

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.

Pollution incidents that cause or threaten material harm to the environment must be notified to each of the following authorities:

- the appropriate regulatory authority (ARA)
- the Environment Protection Authority (EPA) if they are not the ARA
- the Ministry of Health
- the WorkCover Authority
- the local authority, e.g. the local council, if this is not the ARA
- Fire and Rescue NSW.

The [notification protocol](#) provides guidance and contact numbers to assist in notifying these pollution incidents.

Water pollution can threaten both human health and the health of our waterways. Our water resources are of major environmental, social and economic value to New South Wales and when water is polluted the value of the resource can be reduced.

There is a broad allocation of responsibilities under the POEO Act between the EPA, local councils and other public authorities. The EPA is the appropriate regulatory authority for:

- activities listed in Schedule 1 of the POEO Act and the premises where they are carried out
- activities carried out by a State or public authority
- other activities in relation to which a licence regulating water pollution is issued.

In nearly all other cases, the regulatory authority in this district is the Hornsby Shire Council.

End notes

ⁱ 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.

ⁱⁱ Section 153D clause 98C (1)(a) and (b)

ⁱⁱⁱ Section 153D clause 98C(1)(c)

^{iv} Section 153D clause 98C(1)(i)

^v Section 153D clause 98C(1)(j)

^{vi} Testing plans Section 153E [clauses 98C(1)(n),(o) and (p), 98C(2)(f) and (g), 98E(1) and 98E(2)]