



1. Background

Pentarch Logistics P/L (Pentarch) manage a chip mill and export facility on behalf of Allied Natural Wood Enterprises P/L on the shores of Twofold Bay at Eden on the far south coast of NSW approximately 30km south of Eden township. It is known as Lot 1 in DP 224487 and Lots 16, 17 in DP 1066187 in the locality of Eden, Shire of Bega Valley, Parish of Kiah, County of Auckland.

The area comprises a fully developed site containing log storage area, plant, mill, water treatment, chip stockpiles and internal roads and buildings and is approximately 90 hectares (refer figure 1).

Surface water run-off from the operational areas has the potential to provide a pathway for contamination to reach the waters of Twofold Bay.

Pentarch holds an Environmental Protection Licence (EPL) for the chip mill site (No. 1482) for activities including shipping in bulk and wood processing.

This Plan aims to meet the requirement in the Protection of the Environment Operations Act 1997 (POEO Act) to develop a Pollution Incident Response Management Plan (PIRMP).

2. Objectives

Objectives of this plan are:

- to ensure timely communication of a pollution incident to relevant authorities,
- minimise and control the risk of a pollution incident at the Pentarch site,
- ensure the plan is properly implemented,
- ensure staff are adequately trained,
- responsible persons are identified for implementing the plan, and
- ensure the plan is regularly tested.

3. Legislative Requirements

The Protection of the Environment Operations Act 1997 (POEO Act) is the main instrument that Pentarch adheres to particularly regarding management of pollution incidents.

Part 5.7A of the POEO Act and Part 3A of the Protection of the Environment Operations (General) Regulation 2009 indicates all details in preparing and implementing a Pollution Incident Response Management Plan (PIRMP).

4. Contact Details

Company Name	Pentarch Logistics P/L
ABN	99 075 432 254
Postal address	Level 1, 99 Coventry St, Southbank, Victoria 3006
Primary site address	Edrom Road, Eden NSW 2551
EPL Number	1482
Company or business contact details	Name: [REDACTED] Position: Site Manager Business hours contact number: 02 6496 0210 Email: [REDACTED]
Company website details	www.pentarchforestry.com.au/sustainability-environment/environment/



5. Definitions

According to the POEO Act the following definitions apply:

- a) A **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.
- b) A pollution incident that causes or threatens **material harm** to the environment must be notified.

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

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.

It does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

6. Stakeholder Consultation

In the event of a significant pollution incident, neighbours will be notified. The following table provides details of immediate neighbours:

Neighbour	Contact Name	Contact Number
National Parks & Wildlife Service – Merimbula Office	[REDACTED]	0400 459 102 02 6495 5000
THALES (Navy)	[REDACTED]	0401 531 370 02 6499 7006
Forestry Corporation of NSW (Edrom Lodge)	[REDACTED]	0417 523 277
Port Authority of NSW	[REDACTED]	0438 374034 02 6496 1719

Also Refer to Figure 1

A copy of relevant sections of this plan is available on the Pentarch Forestry website.



7. Hazard Identification & Risk Assessment

Pentarch's business activities at the export chip terminal involve receiving pulpwood logs and sawlogs, storage of sawlog and pulpwood logs, processing of sawlogs and pulpwood logs, storage and dispatch of sawn timber and storage and reclaiming of woodchips and loading of these chips onto ships at its Twofold Bay loading facility. There is no direct use of chemicals in these operations.

Waste streams generated at this site includes:

- solid wood waste as a minor proportion of the logs processed, and
- wastewater and sludge from the log washing process at the chip mill site. The wastewater from the log washing operation is treated with caustic soda and alum prior to recycling.

Pollution incidents could occur if:

- solid wastes (including bark) were carried off site into surrounding waters, or,
- water from the water treatment plant not compliant with EPA (Environment Protection Authority) licence conditions were discharged to sea, or,
- un-licensed stormwater discharge (e.g., dam overflow), or,
- if chemicals used to treat wastewater were spilt, or,
- hydrocarbons and fuel used to run and maintain plant on-site were spilt.

Stormwater run-off from highly active areas on the site could also pollute receiving waters if discharged without adequate treatment.

Supporting the main timber processing activity is a maintenance function which involves the use of oils and a limited range of chemicals such as detergent used for cleaning purposes.

Pentarch stores for its own use and sells to its suppliers, significant quantities of diesel fuel that is stored in several bunded, above-ground tanks. Any leak or spill associated with the supply and use of diesel fuel on site would constitute the potential for a pollution incident.

Although Pentarch does not maintain certification to the Environmental Management Standard ISO 14001, this standard is used to provide a framework for managing those aspects of the business which could impact on the environment. This system is the source of administrative measures aimed at preventing pollution incidents.

These include work instructions, check lists and procedures. It also requires the implementation and maintenance of items such as spill kits, water collection and treatment systems and tank bunding.

8. Inventory of Pollutants

The five primary areas where potential pollutants can emanate from the site are:

- Chemical and/or hydro-carbon spillage from mobile plant or water treatment area,
- Muddy water from chipping activities,
- Dust from log yard on windy days,
- Storm water run-off from the log yard (high activity), and,
- Leachate from woodchip storage.



The total volume of diesel at the chip mill site at any one time is typically 170 000 litres (L), total volume of chemicals at the water treatment plant is approximately 20 000 L.

There are eight basins that collect sediment from the chip mill log yard and mill area. These are emptied on a regular basis to a disposal site within the mill boundary as per the Pentarch Waste Management Plan.

Leachate from the chip stockpiles is collected in four basins and is treated through the water treatment plant and re-cycled through the system.

9. Notification of Pollution Incident Procedure

When a pollution incident occurs as per the POEO Act, each of the relevant authorities indicated below must be notified **immediately** when material harm to the environment is caused or threatened.

Key Personnel	Name	24 Hour Contact
Production Manager	[REDACTED]	0467 706 519
Production Manager	[REDACTED]	0401 892 539
Production Supervisor	[REDACTED]	0427 960 241

Only the key personnel listed above are authorised to notify the relevant authorities. They will:

- Call 000 if the incident presents an immediate threat to human health or property. The NSW Police, Ambulance Service and Fire and Rescue are the first responders responsible for controlling and containing incidents.
- Contact the Eden Ports Harbourmaster (02 6496 1719 or 0438 374034) if there is a spill to sea.
- If the incident does not require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order:

Relevant Authority		24 Hour Contact
EPA	Environment Line	13 15 55
Bega Valley Shire	Emergencies	(02) 6499 2222
Goulburn Public Health Unit (Greater Southern Area Health Service)	Business Hours After Hours Public Health Officer	4824 1840 (02) 6080 8900
Workcover Authority	Reporting	13 10 50
Fire and Rescue NSW	Reporting	1300 729 579

- Written notification must be provided to the EPA within 7 days of the initial report.
- Information to be collated includes:
 - Time, date, duration & location of incident,
 - Location of pollution event,
 - Nature, estimated quantity and concentration of any pollutant involved,
 - Circumstances in which the incident occurred,
 - Any action or proposed action taken immediately after the event occurred.



10. Safety Equipment

Pentarch maintains several spill kits around the site, notably at the chipper, sawmill site, briquette plant, maintenance workshop, store, water treatment plant, and Palmcrest fuel facility.

Personal protective equipment which may be required to clean up a spill is available from the Company maintenance store, e.g., rubber gloves and face mask required for cleaning up a spill of caustic soda.

A register of Safety Data Sheets (SDS) covering all chemicals used on site is available at the maintenance store and through the Chem Alert link on the Pentarch Intranet.

11. Actions in the Event of a Pollution Incident

- a. Gatehouse personnel, in co-operation with the Production Manager and/or Supervisor, assess if evacuation of mill site is required,
- b. If so, Evacuation Procedure commences,
- c. Notify relevant authority as per Point 9 above,
- d. If not, Gatehouse personnel attend, and in consultation with the Site Manager or their representative determine appropriate action for clean-up,
- e. Replace spill equipment used in process of cleaning up,
- f. Complete Incident Report.

For further information refer to Figure 3 - Pollution incident response flowchart.

12. Monitoring

12.1 Regulatory monitoring

As part of having an EPA Licence and as per the EPA Document 'Requirements for Publishing Pollution Monitoring Data', Pentarch publishes its monitoring results on its website. Monitoring only occurs in the situation where there is a controlled discharge from the designated discharge point. Items that are monitored include the biochemical oxygen demand (BOD), dissolved oxygen (DO), pH and Total Suspended Solids (TSS).

Discharges are always controlled operations, and occur infrequently, usually no more than once every five years. If no discharge occurs no monitoring is required.

There have been no discharges in at least the last five years.

Results can be found at: www.pentarchforestry.com.au/sustainability-environment/environment/

12.2 Internal Monitoring

Collection pits are monitored for any oily residues. Bunds and collection pits checked for leaks. Pumps are checked regularly to ensure they are working. The Production Supervisor is responsible for ensuring that these are checked at least once per week.

Drains and roads throughout the chip mill site must be kept clean to avoid a build-up of foreign material in the drains which could potentially compromise the efficient operation of the Pentarch Water Management Plan. These are also checked by the Chip/Water Tester weekly and recorded within the Rapid Auditor – Water Management Checklist.



There are three dams used for management of water on-site and for emergency water supply in case of an emergency. The levels of these dams are checked regularly by the gatehouse personnel as part of their regular duties (see figure 3 for location).

13. Staff Training

In order to meet the objectives Pentarch is committed to providing relevant training to all employees. This may include, but not be limited to, first aid, fire extinguisher training and containment of spills training.

Familiarisation of the Pentarch Emergency Procedure is achieved through site induction for new employees, visitors and contractors.

Regular refresher training in Emergency Planning is undertaken as part of the Company's ongoing training programme.

14. Testing

This Plan **must** be tested at least once every twelve months. This will be done as part of Pentarch Emergency Preparedness Procedure.

If a pollution event has occurred on-site a test must be conducted within one month from the date that the incident occurred.

15. Review of Plan

This Plan must be reviewed at least once every twelve months and within one month of any pollution event.

This review will be conducted by the WHSE Co-ordinator in conjunction with the Site Manager.



Figure 1: General Locality Map showing tenure of neighbouring land



Figure 2: Location of Potential Pollutants

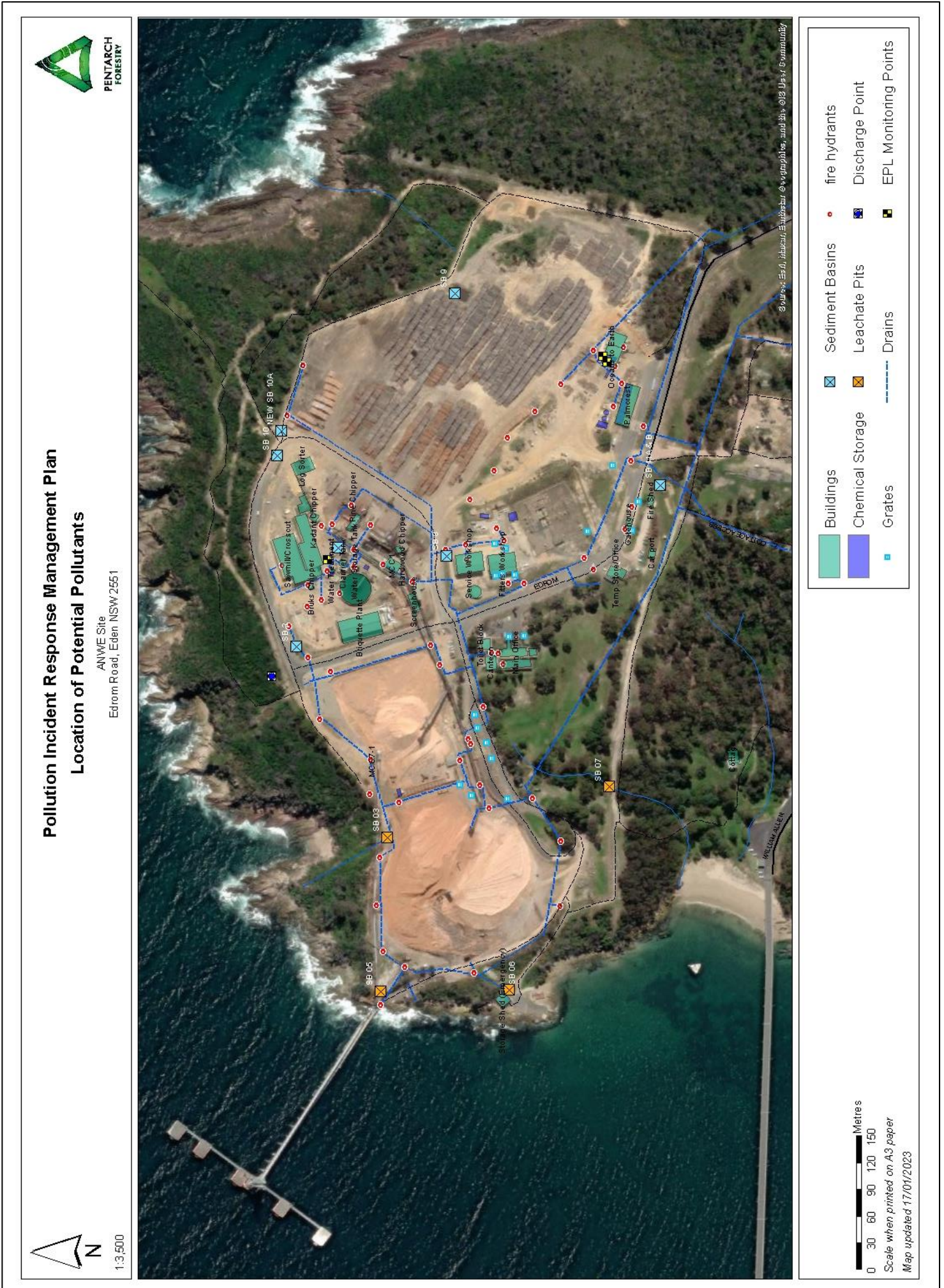
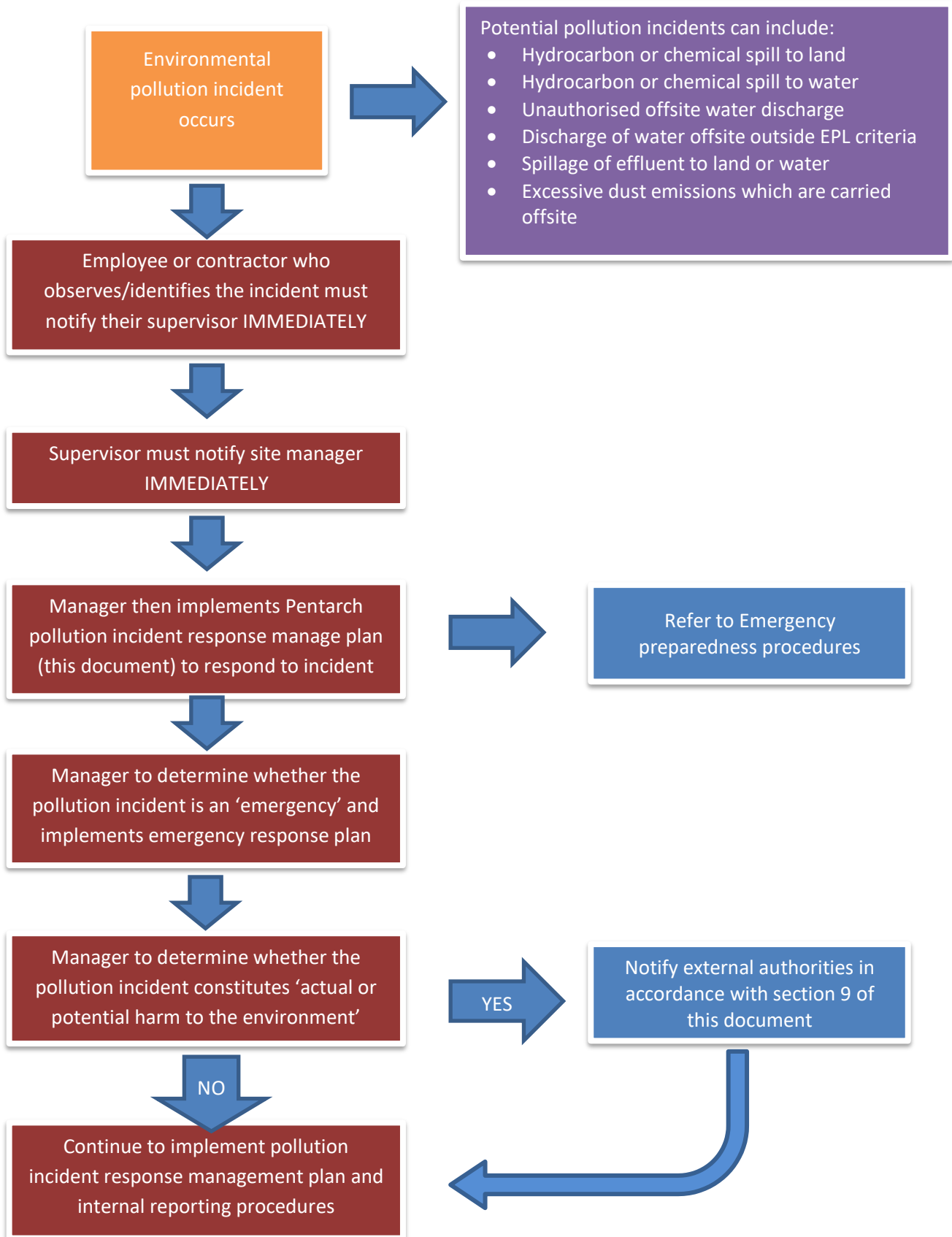


Figure 3: Location of water management plan components



Figure 3: Pollution Incident Response Flowchart





Appendix 1: Incident Response Action Plans

1. HYDROCARBON OR CHEMICAL SPILL TO LAND - LESS THAN 200 LITRES

- Do a quick risk assessment for human risk.
- Access nearest spill response kit.
- Block inlets to any nearby surface water drains with a physical barrier, such as:
 - Absorbent boom or sock from spill kit,
 - Mound of dirt (diesel spills).Note if spill has entered a drainage line or water body, go to point 3 below.
- Where possible and if safe to do so, isolate the source of the spill.
- Notify site manager – 0467 706 519.
- Conduct an assessment of potential hazards and risks.
- Ensure spill area is secured.
- Conduct an assessment of the weather conditions, considering predicted rainfall.
- Wearing appropriate personal protective equipment (see appropriate SDS for correct PPE for the spilled substance), scoop or pump as much pooled substance as possible into a container for either reuse or disposal.
- Ensure container is labelled to be containing hazardous waste.
- Upon removal of majority of the spill, apply the spill absorbent product from the spill kit onto the contaminated area.
- With a stiff bristled broom, mix the absorbent material into the spill until all the spillage is absorbed.
- Once all the hydrocarbon/chemical spill has been absorbed, immediately scoop or shovel the saturated absorbent material into a weatherproof container and label as hazardous waste.
- **DO NOT HOSE DOWN CONTAMINANTS INTO DRAINS OR WATER BODIES.**
- Contact hazardous waste disposal company to remove the waste.

2. HYDROCARBON OR CHEMICAL SPILL TO LAND - MORE THAN 200 LITRES

- Where possible and if safe to do so, isolate the source of the spill.
- Notify site manager on 0467 706 519.
- Do a quick risk assessment for human risk.
- If the spill has the potential to cause harm to the environment, contact NSW EPA's Environment Line on 13 15 55.
- Access nearest spill response kit.
- Block inlets to any nearby surface water drains with a physical barrier, such as:
 - Absorbent boom or sock from spill kit,
 - Mound of dirt (diesel spills).Note if spill has entered a drainage line or water body, point 3 below.
- Conduct an assessment of the weather conditions, considering predicted rainfall.
- If required contact hazardous materials disposal company for 'suck truck' etc.
- Wearing appropriate personal protective equipment (see appropriate SDS for correct PPE for the spilled substance), scoop or pump as much pooled substance as possible into a container for either reuse or disposal.
- Ensure container is labelled to be containing hazardous waste.
- Upon removal of majority of the spill, apply the spill absorbent product from the spill kit onto the contaminated area.



- With a stiff bristled broom, mix the absorbent material into the spill until all the spillage is absorbed.
 - Once all the hydrocarbon/chemical spill has been absorbed, immediately scoop or shovel the saturated absorbent material into a weatherproof container and label as hazardous waste.
 - **DO NOT HOSE DOWN CONTAMINANTS INTO DRAINS OR WATER BODIES.**
 - Contact hazardous waste disposal company to remove the waste.
- 3. HYDROCARBON OR CHEMICAL SPILL TO DAMS AT CHIPMILL SITE (INCLUDING YARD 6, TOP & BOTTOM DAMS)**
- Immediately cease all discharge activities from the dams to prevent downstream and offsite discharge.
 - Immediately cease all pumping to and from dams (isolate spill into one dam).
 - Do a quick risk assessment for human risk.
 - Where possible and if safe to do so, isolate the source of the spill.
 - Notify site manager on 0467 706 519.
 - If the spill has the potential to cause harm to the environment, contact NSW EPA's Environment Line on 13 15 55.
 - Access nearest spill response kit/s
 - Place the floating yellow canvas boom from spill kit around the spill to prevent it from flowing out the overflow.
 - Conduct an assessment of the weather conditions, considering predicted rainfall.
 - If required contact hazardous materials disposal company for 'suck truck' etc.
 - Concentrate the spillage into a confined area on the water dam by manoeuvring the boom. Secure the boom at both ends.
 - Wearing appropriate personal protective equipment (see appropriate SDS for correct PPE for the spilled substance).
 - Remove the substance from the dam by either:
 - Applying absorbent pads from the spill kit/s over the spillage, and/or,
 - Using a 'suck truck' to remove the spillage from the surface of the dam.
 - If using absorbent pads in the previous step, remove the pads from the dam when saturated and place into a waterproof container and label as contaminated waste.
Note that the absorbent pads may be wrung out and reused once they become saturated.
 - Repeat the previous two steps until the spillage has been removed from the dam.
 - Contact hazardous waste disposal company to remove the waste.
- 4. HYDROCARBON OR CHEMICAL SPILL TO BAY**
- Do a quick risk assessment for human risk.
 - Where possible and if safe to do so, isolate the source of the spill.
 - Access nearest spill response kit/s.
 - Place the floating yellow canvas boom from spill kit around the spill to prevent it from spreading.
 - Notify site manager on 0467 706 519.
 - Contact Eden Harbourmaster.
 - If the spill has the potential to cause harm to the environment, contact NSW EPA's Environment Line on 13 15 55.
 - Implement NSW Maritime Twofold Bay Oil and Chemical spill contingency Plan.

5. OFFSITE DIRTY WATER DISCHARGE

- Do a quick risk assessment for human risk.
- Attempt (if safe to do so) to cease all inflow into the dam/pit that is overflowing.
- Notify site manager on 0467 706 519.
- If the spill has the potential to cause harm to the environment, contact NSW EPA's Environment Line on 13 15 55.
- Assess the need to construct a temporary bund.
- Assess viability of:
 - Pumping water from overflowing dam into one of the other two dams, and/or,
 - Discharging the water back onto the site via the sprinkler system, and/or,
 - Contacting wastewater disposal company to pump out the dam/s.
- If safe to do so, take a water sample from the discharging dam using a CLEAN container and contact ALS Environmental – Canberra: (02) 6202 5400 for analysis details.

6. FIRE

- Do a quick risk assessment for human risk.
- Attempt (if safe to do so) to control the fire using an appropriate fire extinguisher or hose and contact the local fire brigade (000).
- Notify site manager on 0467 706 519.
- Assess the need to evacuate the site and follow Emergency Response Plan.