



NSW National Parks and Wildlife Service

Pretty Beach sewage treatment plant Murramarang National Park

Pollution incident response management plan



Acknowledgement of Country

Department of Climate Change, Energy, the Environment and Water acknowledges the Traditional Custodians of the lands where we work and live.

We pay our respects to Elders past, present and emerging.

This resource may contain images or names of deceased persons in photographs or historical content.

© 2024 State of NSW and Department of Climate Change, Energy, the Environment and Water

With the exception of photographs, the State of NSW and Department of Climate Change, Energy, the Environment and Water (the department) are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged. Specific permission is required to reproduce photographs.

Learn more about our copyright and disclaimer at www.environment.nsw.gov.au/copyright

Cover photo: Pretty Beach, Murramarang National Park. D Finnegan/DCCEEW

Published by:

Environment and Heritage
Department of Climate Change,
Energy, the Environment and Water
Locked Bag 5022, Parramatta NSW 2124
Phone: +61 2 9995 5000 (switchboard)
Phone: 1300 361 967 (Environment and Heritage enquiries)
TTY users: phone 133 677, then ask for 1300 361 967
Speak and listen users: phone 1300 555 727, then ask for 1300 361 967

Email: info@environment.nsw.gov.au

Website: www.environment.nsw.gov.au

ISBN 978-1-923200-08-1

EH 2024/0100

March 2024

Find out more about your environment at:

environment.nsw.gov.au



Contents

Introduction	1
Legislative requirements	1
Definition of ‘pollution incident’	2
Description and likelihood of hazards	2
Pre-emptive actions to be taken	3
Inventory of pollutants	3
Safety equipment	3
Minimising harm to people on the premises	4
Actions to be taken during or immediately after a pollution incident	4
Actions to take	4
Staff training	5
Implementing plans	5

List of figures

Figure 1 Pretty Beach sewage treatment plant site map

6

Introduction

The objective of this plan is 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 *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) (such as local councils, NSW Ministry of Health, WorkCover NSW and Fire and Rescue NSW) 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 the people responsible for implementing it and ensuring that the plan is regularly tested for accuracy, currency and suitability.

Legislative requirements

The requirements for pollution incident response management plans are set out in Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act) and the *Protection of the Environment Operations (General) Regulation 2009* (POEO (G) Regulation). This provision requires that:

- 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).

Definition of 'pollution incident'

The definition of a pollution incident is:

- 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'. Under section 147 of the POEO Act harm to the environment is material if:

1. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
2. 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).

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 more quickly.

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.

Description and likelihood of hazards

The main hazard to human health or the environment associated with the sewage treatment plant (STP) at Pretty Beach is a spill or overflow of effluent. The likelihood of an effluent spill at Pretty Beach is considered low, however there are circumstances or events that would increase the likelihood of a spill occurring. These include a blockage in the system, a power supply failure during peak visitation, the failure of containment tanks or inadequate management of treated-effluent disposal options during peak visitation periods.

Given the size of the STP and management operations at Pretty Beach other potential hazards are limited, as no chemicals or waste materials (apart from effluent) are stored at the site.

There are no sensitive environments near the site such as a densely populated area, school, hospital or water body that would increase the risk of environmental or health impacts of a pollution incident. Additionally, there are no facilities near the site that handle dangerous or explosive materials that could be impacted by a pollution event.

Pre-emptive actions to be taken

Pre-emptive actions that have been and continue to be implemented at Pretty Beach STP include:

- Construction and maintenance of an earth bund around the absorption trench area to prevent stormwater entering the site; or, in the event of an effluent spill within the absorption trench area, to assist with containment of the spill.
- Installation and maintenance of an alarm system in the equalisation tank (primary tank). There is a high-level float in the primary tank. When this level is reached the flashing light indicates the tank is approximately 90% full.
- Installation and maintenance of alarm systems on the 3 treatment tanks. If the transfer pump in each treatment tank fails, the water level in the pump chamber in each treatment tank will rise and activate the treatment tank full alarms. The rising water pressurises the diaphragm switch in the control box to activate the alarm. A float switch will immobilise the subject tank's metering pump to prevent the tank from flooding.
- Daily monitoring of primary tank and timers. This is particularly critical during high visitation periods to ensure consistency between inflows to primary tanks and outflows to treatment tanks. The aim is to prevent the primary tank from spilling effluent. The drawing down of effluent levels in the primary tank (through the manipulation of primary tank timers) prior to the peak visitation periods provides greater capacity for the primary tank to manage peak effluent loading and allows the treatment tanks sufficient time to treat effluent effectively.
- Quarterly maintenance and annual checks of the STP as recommended by the manufacturer's guidelines.
- Installation and maintenance of public exclusion fencing and signage surrounding the STP area and subsurface irrigation areas.

Inventory of pollutants

The primary pollutant at the site is effluent. The maximum quantity of effluent that can be stored at the site is:

- 20,000 L (septic tank)
- 50,000 L (primary tank)
- 21,000 L (treatment tanks)
- 7,000 L (mixing tank – treated).

Small amounts of amenity cleaning products are stored in a locked room within the amenity block. The risk of such cleaning products causing a pollution incident is negligible.

Safety equipment

Personal protective equipment (PPE) is located onsite for staff to use, together with appropriate job safety analysis prepared for operation and maintenance of the STP. Items available to staff include elbow-length PVC gloves, eye protection, masks and training.

Minimising harm to people on the premises

In the event of a pollution incident the following procedures will be followed to minimise harm to people on the premises:

- maintenance of signage and exclusion fencing around the STP and effluent disposal areas
- the erection of temporary exclusion fencing and pollution notification signage if the pollution incident affects areas beyond the existing public exclusion areas
- campground staff must notify campers and day users of the pollution event and exclusion requirements from the pollution area to minimise harm
- in the event of a catastrophic pollution event involving mass effluent spillage the site may have to be evacuated.

Actions to be taken during or immediately after a pollution incident

In the event of a blockage in the STP, power supply failure, or irrigation pump failure there are things that should be done to ensure an environmental pollution event does not occur or is minimised.

If a blockage or power supply failure occurs for an extended period, sewage will back up within the system and eventually surface somewhere.

Actions to take

1. Immediately contact a pump-out contractor, notify them that it is an emergency and direct the contractor to pump out from the main septic tank first then the primary holding tank.
Turn off all showers in amenities and notify guests of restricted amenities use.
Notify the pump-out contractor that an emergency effluent line, valve and pump have been added to the primary tank to allow efficient pump out in the event of an emergency to prevent or minimise a pollution incident
2. If any effluent has spilled, redirect it into the bunded absorption area to capture contamination using plumbing installed in the bund wall adjacent to the primary holding tank.

If the irrigation pump fails, treated effluent will breach the mixing tank and flow over ground along the eastern and southern earth bund of the absorption trench. The topography in the area directly adjacent to the STP is gently sloping and naturally vegetated beyond the cleared absorption trench area. Given this, the potential risk of material harm to the environment is considered low. However, in the event of the irrigation pump failing, an emergency pump-out should be implemented until the problem is rectified.

In the event of a significant effluent spill an emergency pump-out contractor (contact details located within emergency contact list) will be engaged to use spill containment equipment, clean up the spill with waste disposal tankers, remove waste from the site and dispose of it at an approved waste disposal facility.

Staff training

Staff who manage Pretty Beach campground and day-use area will be trained in incident management. Training involves toolbox talks on incident management procedures in the event of a pollution threat or incident, together with simulated incident exercises. Relevant staff will be made familiar with this document and its location will be readily available. Records of training exercises will be kept on site.

Implementing plans

If a pollution incident occurs in the course of an activity at the site and material harm to the environment is caused or threatened, the person carrying out the activity must immediately implement any pollution incident management response that has been developed in this document to meet the requirements of the *Protection of the Environment Operations Act 1997* (POEO Act).

Pretty Beach incident response management plan



Figure 1 Pretty Beach sewage treatment plant site map