



Pollution Incident Response Management Plan

**Sewage Treatment Plant, Advanced Water Recycling Facility,
Sewage Pump Station & Water Treatment Plant**

January 2024

External web-based version

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Parkes
Shire Council

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Pollution Incident Response Management Plan

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External Incident Contact Details

Organisation	Contact Number
Emergency Services	000
Parkes Hospital	6862 2400
Parkes Police Station	6268 9999
EPA Dubbo Regional Office	131 555 02 6883 5330
DPI Water or Fisheries (if involves surface water, groundwater or sensitive aquatic habitat)	1800 353 104
NSW Health On Call Public Health Officer (24 hours) Dubbo Regional Office	02 9391 9000 0418 866 397 02 6841 5569
WorkCover	131 050
Fire & Rescue NSW Parkes Rural Fire Service	02 6263 5951 02 8741 5555
PSC after hours emergency (5pm – 8:30am)	1800 648 585

Abbreviation/Acronym/Terms

Abbreviation/Acronym or Term	Description
AWRF	Advanced Water Recycling Facility
EMP	Emergency Management Plan
DPI Water	Department of Primary Industries – Water. Division of DPI responsible for the management of NSW surface water and groundwater resources.
DPI Fisheries	Department of Primary Industries – Fisheries. Division of DPI responsible for the management of NSW fishery resources.
Environmental Incident	<p>An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, or land) or an adverse environmental impact has occurred, is occurring, or is likely to occur.</p> <p>An adverse environmental impact may include contamination, harm to flora and fauna (either individual species or communities), damage to heritage items and adverse community impacts.</p> <p>For the purposes of this PIRMP, 3 types of environmental incidents are defined:</p> <p>1) Pollution incident</p> <p>The definition is taken from the Dictionary of the POEO Act as follows:</p> <p>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</p>

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Abbreviation/Acronym or Term	Description
	<p>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.</p> <p>2) Non-Compliance Breach of any condition of approval, license, permit or any other statutory approval relevant to the activity and/or area where the activity occurs.</p> <p>3) Environmental Issue An environmental incident which does not involve pollution and is not a non-compliance. This includes, but is not limited to: non-conformance with PSC's environmental management policies and plans non-conformance with contractual requirements related to environmental protection for contracted activities</p>
EPA	NSW Environment Protection Authority
EPL	Environment protection license
Flood Event	The inundation of land that is normally dry through the overflowing of a body of water, normally from a river to submerge (land)
IDEA	Intermittently Decanted Extended Aeration
Investigation	The process by which the cause(s) of an incident is examined and identified.
Legal Privilege	A rule of law that protects the confidentiality of communications made between a lawyer and his or her client. Legal professional privilege protects confidential communications between a lawyer and his or her client made for the dominant purpose of either seeking or giving legal advice or professional legal assistance; or use, or obtaining material for use, in legal proceedings that had commenced, or were reasonably anticipated, at the time of the relevant communication.
Material harm to the environment	<p>The definition is taken from Section 147 under Part 5.7 - Duty to Notify Pollution Incidents of the POEO Act as follows.</p> <p>(1) For the purposes of this Part:</p> <p>(a) harm to the environment is material if:</p> <p>(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or</p> <p>(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</p> <p>(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.</p> <p>(2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.</p>
Notifiable event	An incident, activity or event that triggers a specific statutory requirement to notify a regulatory authority.
OEH	NSW Office of Environment and Heritage
OMP	Operational Management Plan
PIRMP	Pollution Incidence Response Management Plan
PMO	Project Management Office

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Abbreviation/Acronym or Term	Description
POEO Act	Protection of the Environment Operations Act 1997
POEO(G)	Pollution of the Environment Regulations 2012
PPE	Personal Protective Equipment
Pollution	Pollution, air pollution, water pollution, noise pollution and land pollution all have the meanings as defined in the Dictionary to the POEO Act.
Pollution Incident	within the meaning of section 147 of the POEO Act – see above 'Environmental Incident'
PSC	Parkes Shire Council
PWWF	Peak Wet Weather Flow
RM	Rising Main
RPZ	Reduced Pressure Zone - an RPZ valve is a backflow device. This device is installed onto your plumbing system to protect your drinking water and the city water supply from contaminants.
RWS	Recycled Water Scheme
Sewer Chokes	Blockage in a wastewater pipe
Sewer Jetting	Method of cleaning sewer and drain lines using high pressure water
SDS	Safety Data Sheet
SPS	Sewage Pump Station
STP	Sewerage Treatment Plant
Technical Manager	PSC Manager of Infrastructure Operations
UV	Ultra-violet
Valve Exercising	Opening and closing the valve to check it is functioning properly and performing maintenance when required
WTP	Water Treatment Plant



1. Introduction

1.1. External Web-based Version

This external web-based version of Parkes Shire Council's Pollution Incident Response Management Plan (PIRMP) has been prepared in accordance with the Environment Protection Authority's (EPA) requirements that the following sections of the plan be made publicly available:

- procedures for contacting the relevant authorities including the EPA, the local council, NSW Health, SafeWork NSW, Fire and Rescue NSW and their contact details.
- procedures for contacting the owners or occupiers of premises in the vicinity.
- procedures for communicating with the community.
- mechanisms for providing early warnings and regular updates to premises in the vicinity.

Personal information as defined in the Privacy and Personal Information Protection Act 1998 is not to be made publicly available.

A copy of the full PIRMP is maintained at the premises to which the relevant licence relates and is readily available to the persons responsible for implementing the plan and to an authorised officer of the EPA on request.

1.2. Background

This PIRMP has been prepared in accordance with section 153A of the Protection of the Environment Operations Act 1997 (POEO Act) and developed in accordance with the NSW EPA's Guideline: Pollution Incidence Response Management Plans (EPA, 2022).

This PIRMP has been updated following the development of the new Parkes Sewage Treatment Plant (STP) (to which EPL 5655 applies) and associated infrastructure such as the new Sewage Pump Station (SPS), Rising Main (RM) and Advanced Water Recycling Facility (AWRF).

The new Water Treatment Plant (WTP) is a zero-discharge facility, and as such, does not require an EPL. However, for completeness, information pertaining to the WTP has been included in this document (Section 2.2).

1.3. Scope and Legislative Requirements

The purpose of the PIRMP is to assist with the identification and characterisation of pollution risks from the operation of the Parkes Water and Sewerage treatment systems. Under the Protection of the Environment Operations Act 1997 (POEO Act) and Protection of the Environment Legislation Amendment Act 2011 (PELA), holders of environmental protection licences (EPLs) are obliged to:

- Prepare a Pollution Incident Response Management Plan (section 153A, POEO Act).
- Keep the plan on the premises to which the PIRMP relates (section 153D, POEO Act).
- Test the plan at regular 12-month intervals or following a pollution incident (clause 98E).
- Implement the PIRMP if a pollution incident occurs (section 153F, POEO Act).

This plan outlines response procedures in the event of a Pollution Incident, as well as providing a reference document to inform Council staff and contractors of the required management procedures and reporting obligations. It is intended that the PIRMP be a live document undergoing regular updates at nominated periods or when circumstances change. Under Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) and



Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012, the PIRMP will:

- Assist to identify risks that may lead to a Pollution Incident at the facilities
- Provide guidance on incident notification protocols in the event of an emergency as per the EPL conditions and the requirements outlined in the POEO Act
- Identify responsibilities in the event of an environmental incident
- Provide guidance on incident investigation procedures
- Provide guidance on a list of pre-emptive measures and preventative actions including actions to minimise harm to persons on the premises
- Be written and available at the premises and able to be provided to an authorised EPA officer on request
- Indicate the frequency of review and test of the plan (12 monthly).
- Have a relationship with other plans i.e. OEMP, emergency response plans (EMP) etc.
- Include details of specific safety equipment
- Include modes of communication with neighbours and the local community

1.4. Implementation

The PIRMP will be readily available at the STP and WTP sites in preparation of a likely or actual Pollution Incident (within the meaning of section 147 of the POEO Act). The person carrying out the activity must immediately implement the Pollution Incident management response developed in Section 4.

PSCs Director Infrastructure and Strategic Futures and Manager Infrastructure Operations is responsible for the implementation of this plan.

2. Facilities

2.1. Sewage Treatment Plant

PSC operates the Parkes Sewage Treatment Plant (STP) and sewerage system (sewer reticulation network) throughout Parkes.

The STP is located on Akuna Road, Parkes and contains:

- Inlet works
- Intermittently Decanted Extended Aeration (IDEA) tanks
- Equalisation basin
- Clarification
- Sludge lagoons
- Chemical phosphorus removal
- Ultra-violet (UV) disinfection before discharging to Goobang Creek
- Retained water storage tank.

As part of the construction of the new STP, a new SPS and RM was constructed on the old STP site. The SPS and RM receives gravity flow from the sewer reticulation network and conveys this flow to the new STP inlet works.

The old STP and associated effluent ponds will be decommissioned (excluding the SPS/RM infrastructure) when timing is appropriate. The effluent ponds will be rehabilitated to unregulated natural wetlands following the transfer and will cease operation as tertiary treatment ponds. The ponds will no longer operate under the EPL once rehabilitated.



2.2. Nash Street Sewage Pump Station

The Sewage Pump Station (SPS) receives gravity flow from the sewer reticulation network and conveys this flow to the STP inlet works.

2.3. Advanced Water Recycling Facility

An Advanced Water Recycling Facility (AWRF) has been constructed adjacent to the new STP as part of council's Recycled Water Scheme (RWS). The AWRF will improve and expand the existing Effluent Reuse Scheme which will be transitioned from the old STP to the new STP/AWRF. The AWRF will treat tertiary effluent from the STP Tertiary Clarifier to produce recycled water for non-potable (irrigation) purposes. It is the intention of PSC to operate the AWRF seasonally during the warmer months to provide 2 ML/day of recycled water supply. The existing effluent reuse for irrigation of the golf course and racecourse will transition to the AWRF.

The AWRF consists of:

- Primary treatment
- Secondary treatment
- Lagoon storage (AWRF Feed Storage)
- UV disinfection
- Chlorine disinfection
- Recycled water storage tank

2.4. Water Treatment Plant

Parkes Shire Council operates the Parkes/Peak Hill Water Supply System which supplies the towns of Parkes and Peak Hill, as well as the villages of Alectown and Cookamidgera. The WTP is located at the intersection of Webb and Danilenko Streets, Parkes.

The WTP consists of:

- Raw water balance tank,
- Flocculation process for pre-treatment,
- Dissolved Air Flotation and Filtration (DAFF) system,
- Treated water storage tank,
- Pump station,
- Disinfection and
- High-level reservoir
- Chemical storage shed

3. Notifiable Incidents

3.1. What Must be Notified

A Pollution Incident is defined by the POEO Act as:

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.

Material harm is defined by the POEO Act as:



(1) For the purposes of this Part:

(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.

(2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

3.2. Responsibility to Notify

Under Section 148 of the POEO Act, all personnel have a duty to notify.

All personnel can include:

- The person carrying out the activity
- An employee or agent carrying out the activity
- An employer carrying out the activity; or
- The occupier of the premises where the incident occurs

Once determined that the incident causes or threatens material harm to the environment, notification must be given immediately, i.e., promptly and without delay, after the person becomes aware of the incident.

4. Incident Response

For a major pollution incident, incident response is to be undertaken as per EPL requirements set out below. PSC has developed a procedure for cleaning up after a sewer overflow; this procedure should be consulted and followed for all incidences that involve overflows from the sewerage system.

If an incident occurs at the WTP, follow the general EPA requirements set out below.

4.1. EPL Requirements - STP only

The following outlines the procedure to follow in accordance with EPL 5655 (pp18-20)

R2. Notification of environmental harm

R2.1 Notifications must be made by telephoning the Environment Line service on 131555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 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.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- a) where this licence applies to premises, an event has occurred at the premises; or*
- b) by where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.*

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request,

R3.3 The request may require a report which includes any or all of the following information:

- a) the cause, time and duration of the event;*
- b) by the type, volume and concentration of every pollutant discharged as a result of the event;*
- c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;*
- d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;*
- e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;*
- f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and*
- g) any other relevant matters*

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Other notifications

R4.1 Where either:

- a) sewage or partially treated sewage is discharged from the premises as a result of a bypass of the sewage treatment plant, or:*



b) by an observed or reported overflow has occurred from the reticulation system, and overflow or bypass may pose a risk to public health, the licensee is to promptly give appropriate notification to any parties that are likely to be affected, including:

i) the potentially affected community;

ii) the Department of Health;

(iii) Other parties as identified in, and in accordance with, the Incident Notification Protocol prepared by Parkes Shire Council dated 17 January 2006.

Additional Considerations:

M5 Recording of pollution complaints.

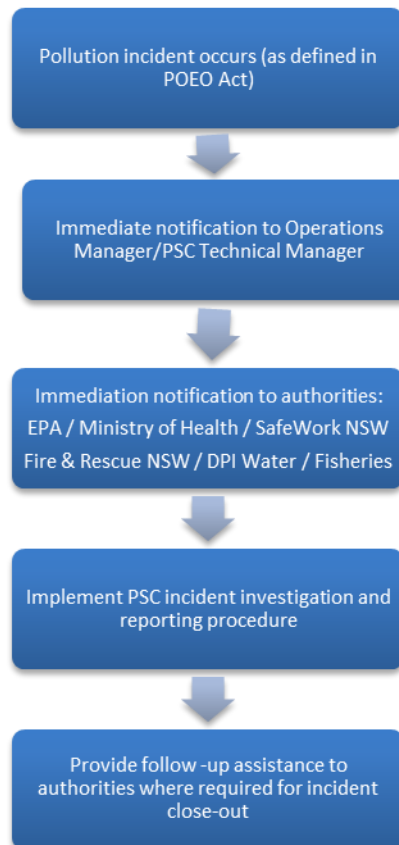
M8 Requirement to record bypass incidents from sewage treatment plants.

4.2. Incident Notification Checklist

When undertaking a notification of a Pollution Incident by phone, the following information may need to be provided:

1. The Environmental Protection License (EPL 5655) number and name of EPL holder
2. The name and telephone number of the designated contact person
3. The location of the emergency or incident. Be as specific as possible, but if you do not know, do not guess and provide general detail only (e.g. the STP discharge point at Goobang Creek)
4. The date and time of the incident. If you do not know the precise time, you can say "At approximately, 7.00 am but the precise time is still under investigation". If you do not know, just say "Precise date and time is still being determined, subject of ongoing investigation".
5. The time the holder of the EPL became aware of the incident/event
6. The estimated quantity and type of any substances involved in the incident. If you do not know and cannot give an educated estimate state "Estimated quantity/type of substance is still being investigated".
7. The likely cause of the Incident. If you do not know state "The cause of the incident is being investigated". It is important not guess or speculate in giving this response.
8. A description of the effects of the incident including environmental harm caused, threatened, or suspected to be caused by the incident. State the facts only and do not speculate.
9. Any sampling conducted or proposed, relevant to the emergency or incident.
10. Immediate actions taken to prevent or mitigate any further environmental harm caused by the emergency or incident. Be as detailed as you can, as this will demonstrate that you have taken and will be taking all reasonable and practicable measures to limit the potential harm.

The flowchart below shows the process of notifying, reporting and investigating Pollution Incidents once they have occurred.



Pollution Incident Response Flowchart

4.3. Pollution Incident - STP/WTP

As per the definition of a Pollution Incident above and resulting from the risk assessments conducted by PSC, PSC have identified the following activities as potential to cause material harm to the environment. The following are related to PSCs water and sewer operations that may require immediate notification to the EPA:

- Sewer discharge from the reticulation network
- Sewer discharge from the SPS emergency overflow tanks.
- Failure to meet the discharge parameters contained in the EPL
- Chlorine gas leak

It is a requirement under the POEO Act Section 148 that industry also report Pollution Incidents immediately to:

- NSW Ministry of Health
- Fire and Rescue NSW
- SafeWork NSW
- The potentially affected community

4.4. Minor Incident

Council maintain incident response procedures for minor incidents throughout the water and sewer network including:

- Sewer choke



- STP overflow/bypass, as per EPL
- Chemical spill, as per SDS for specific chemical held in ChemWatch

PSC have also developed a spill containment procedure to address any potential spillage of fuels, paints or chemicals that may occur.

5. Incident Reporting

Details of sewer overflows are to be recorded as per the Sewer Overflow Report which are maintained by PSC. The Manager of Infrastructure Operations shall review the details of the Incident Report and consider seeking legal advice. A Sewer Overflow Report Form must be generated and must contain the following:

- Incident details
- Incident investigation
- Incident action plan
- Knowledge sharing

The Manager of Infrastructure Operations shall review the Incident Report and request further actions if required. If the incident has been investigated thoroughly and all identified actions have been carried out, the Manager of Infrastructure Operations may sign off on the Incident Report and the incident may be closed. If requested, a copy of the Incident Report must be forwarded to the regulatory authorities that were notified of the incident to inform them of the progress and close-out of the environmental incident. Important points to note while reporting incidents are:

- Consider seeking legal advice before commencing any investigation into the incident or before generating any reports or documentation in relation to the incident.
- If legal advice is sought, legal privilege must be applied prior to sending any communications.
- Keep all protected or privileged documents and communications (verbal or written) confidential and limit their duplication and circulation. Avoid openly sharing information in regard to the incident. Refer only to facts and wait until the incident investigation is finalised before discussing the incident outside the organisation.

5.1. Community Notification

The Infrastructure Operations Manager shall determine the most appropriate mechanisms for providing early warnings regular updates to premises in the vicinity of a major Pollution incident. Residents will be notified immediately and may be further contacted by an emergency services representative, such as in instances where evacuation or critical safety actions are considered necessary. The following tools are recognised by Council as being effective means of communication:

- Face-to-face communication e.g., door knocking
- Same - day phone calls and follow-up phone calls to landholders affected by the incident over the following 24-hour period
- Local media (including radio)
- PSC Website and social media
- Placement of Council signage boards
- Letterbox drops

Information provided to the community would depend on the incident, but may include:



- Description of the incident
- Status of incident
- Response actions
- Actions to minimise harm/ remediation
- Likely duration
- Site contact details
- Advice and recommendations based on the incident type and scale.